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NO. 377 JANUARY 1976

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DATA FOR
JULY 1975
JUNE 1975
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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No. 377

Issued in two parts

Hope I. Leighton, Editor

J. Virginia Lincoln, Director
Solar - Terrestrial Data Services Division

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Note: A = Part I, B = Part II.

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JULY 1975 DATA

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Hα SOLAR FLARES

JULY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX. LAT.	APPROX. LNGE DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONG.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
	01	0000	0300	NO FLARE PATROL													
GRP62283	01	0743+2	0744+3	0751	N08	W08	.165	13738	30.7	8	-F				20	.2	H
MONT	01	0743	0744	0753	N08	W07	.151	13738	30.8	10	-F		C	0744	20		
ATHN	01	0745	0747	0751	N08	W08	.165	13738	30.7	6	-F	4	C		16		DE H
ATHN	01	0745	0747	0751	N08	W08	.165	13738	30.7	6	-F	4	V		16		DE H
	02	0145	0156	NO FLARE PATROL													
284 TACH	02	0322	0327	0339	N10	W18	.329	13738	30.8	17	-N		C	0328	141	1.5	E
GRP62285	02	0755+3	0802+5	0819	N08	W21	.366	13738	30.8	24	-N						EK
ABST	02	0755	0802	0825	N11	W22	.395	13738	30.7	30	-N		C	0802	175	1.9	EK
CATA	02	0755	0805	0835	N09	W21	.370	13738	30.8	40	1F	3		0805	196	2.2	
HTPR	02	0757	0807	0821	N07	W23	.395	13738	30.6	24	-N		C	0808	40	.4	E
MEUD	02	0757	0803	0813	N08	W20	.351	13738	30.8	16	-F		C	0803	60	.7	E
MONT	02	0758	0804	0814	N10	W21	.375	13738	30.8	16	-N		C	0804	110		EK
ATHN	02	0800E	0802	0814	N06	W18	.312	13738	1.0	140	-N	4	C		32		F
286 HTPR	02	1010	1017	1018	N06	W30	.501	13738	30.2	8	-F		C	1017	20	.2	
287 HTPR	02	1405	1414	1428	N06	W25	.424	13738	30.7	23	-F		C	1414	20	.2	
288 HTPR	02	1552	1555	1558	N07	W33	.546	13738	30.2	6	-F		C	1555	20	.2	E
GRP62289	02	1621+2	1625+5	1636	N06	W31	.516	13738	30.4	15	1N				230	2.7	HS
BOUL	02	1621	1627	1638	N06	W30	.501	13738	30.4	17	1N	2	C	1627	236	2.7	S
RAMY	02	1622	1627	1637	N06	W31	.516	13738	30.4	15	1N	4	C		243		H S
HTPR	02	1623	1627	1635	N08	W33	.548	13738	30.2	12	-B		C	1627	150	1.7	E
MCMA	02	1623	1626	1635	N06	W32	.531	13738	30.3	12	1B		C	1626	180	2.2	H
MEUD	02	1623	1625	1635	N07	W30	.502	13738	30.4	12	1N		C	1625	300	3.5	H
RAMY	02	1626	1630	1640	N06	W31	.516	13738	30.4	14	1N	4	V		288		F H
290 HTPR	02	1706	1713	1721	N08	W30	.504	13738	30.5	15	-F		C	1713	20	.2	
291 BOUL	02	1814	1820	1827	N06	W31	.516	13738	30.4	13	-F	2	C	1820	21	.3	
	02	2157	2201	NO FLARE PATROL													
	03	0018	0030	NO FLARE PATROL													
	03	0050	0055	NO FLARE PATROL													
	03	0105	0117	NO FLARE PATROL													
GRP62292	03	0819+2	0822 0842+3	0914	N04	W29	.484	13738	1.2	55	-F				140	1.6	EK
HTPR	03	0819	0822	0915	N05	W28	.469	13738	1.2	56	-F		C	0822	20	.2	EK
MONT	03	0821	0842	0913	N05	W30	.500	13738	1.1	52	-N		C	0842	110		
HTPR	03	0822	0822	0826	N04	W35	.573	13738	30.7	4	-F		C	0822	10	.1	
CATA	03	0835E	0845	09000	N04	W28	.469	13738	1.3	250	-F	3		0845	168	2.0	
KHAR	03	0840E		08400	N05	W28	.469	13738	1.3		1N		V				
GRP62293	03	1013+0	1013+1	1016	N07	W40	.643	13738	30.4	3	-F				30	.4	E
MONT	03	1013	1014	1016	N08	W41	.657	13738	30.4	3	-F		C	1014	20		
HTPR	03	1013	1013	1015	N08	W42	.670	13738	30.3	2	-N		C	1013	30	.4	E
HTPR	03	1013	1023	1033	N06	W37	.602	13738	30.7	20	-F		C	1023	20	.2	
MEUD	03	1014		1016	N07	W40	.643	13738	30.4	2	-F		C	1014	30	.4	C
294 HTPR	03	1414	1415	1432	N07	W29	.487	13738	1.4	18	-F		C	1415	10	.1	E
295 HTPR	03	1502	1502	1504	N07	W34	.560	13738	1.1	2	-F		C	1502	20	.3	
GRP62296	03	1610+3	1614+3	1621	N06	W44	.694	13738	30.4	11	-N				40	.6	E
RAMY	03	1610	1615	1622	N05	W45	.706	13738	30.3	12	-F	4	C		36		DE
ZURI	03	1611	1615	1619	N06	W45	.706	13738	30.3	8	-N		C	1615	53	.8	
MCMA	03	1611	1614	16160	N06	W45	.706	13738	30.3	50	-N		C	1614	40	.6	E
BOUL	03	1613	1617	1625	N05	W43	.681	13738	30.5	12	-F	2	C	1617	43	.6	
HTPR	03	1613	1615	1620	N07	W34	.560	13738	1.1	7	-N		C	1615	40	.6	E
GRP62297	03	1629+1	1632+1	1637	N06	W44	.694	13738	30.4	8	-F				20	.3	
MCMA	03	1629	1632	1636	N06	W45	.706	13738	30.3	7	-N		C	1632	30	.4	D
HTPR	03	1630	1633	1638	N07	W34	.560	13738	1.1	8	-F		C	1633	10	.1	E
GRP62298	03	1732+4	1739+1	1750	N05	W44	.694	13738	30.4	18	-F				20	.3	L
BOUL	03	1732	1739	1758	N04	W44	.694	13738	30.4	26	-F	2	C	1739	21	.3	
HTPR	03	1735	1740	1750	N04	W43	.681	13738	30.5	15	-N		C	1740	20	.3	E
MCMA	03	1736		1746	N06	W45	.706	13738	30.4	10	-F		C	1738	20	.3	DL
299 MCMA	03	1940E	1943	1949	N06	W47	.731	13738	30.3	90	-F		C	1943	25	.3	DL

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMR DAY	MIN.		CONQ	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP62300	03	2122+4	2126+3	2136	N06	W47	.731	13738	30.4	14	-F				35	.5	DL
MCMA	03	2122	2126	2132	N06	W48	.742	13738	30.3	10	-N		C	2126	30	.5	DL
BOUL	03	2126	2129	2140	N07	W46	.719	13738	30.4	14	-F	2	C	2129	43	.6	
	03	2302	0025	NO FLARE PATROL													
	04	0108	0119	NO FLARE PATROL													
	04	0124	0135	NO FLARE PATROL													
GRP62301	04	0237	0247+1	0255	N06	W48	.742	13738	30.5	18	-F				70	1.0	
TEHR	04	0237	0248	0255	N07	W48	.742	13738	30.5	18	-F	2	C		60		DE
MANI	04	0245E	0247	0248D	N06	W48	.742	13738	30.5	30	-F	3	P	0247	80	1.2	
302 UPIC	04	1140E		1140D	N07	W51	.776	13738	30.7		-F		P	1140	20		
303 UPIC	04	1145E		1145D	N05	E75	.965	13750	10.1		-F		P	1145	41		
GRP62304	04	1220+3	1225+5	1240	N06	E75	.965	13750	10.1	20	-N						
CATA	04	1205	1225	1250D	N06	E73	.955	13750	10.0	45D	-F	3		1225	56		
UPIC	04	1220	1230U	1245	N05	E75	.965	13750	10.1	25	1N		P	1230	61		
RAMY	04	1223	1229	1235D	N06	E76	.969	13750	10.2	12D	-N	4	V		20		DE
RAMY	04	1223	1229	1232	N07	E75	.965	13750	10.1	9	-F	4	C		18		DE
ATHN	04	1226E	1227U	1239	N04	E76	.970	13750	10.2	13D	-N	3	C		32		DE
GRP62305	04	1329+6	1339+3	1402	N06	E74	.960	13750	10.1	33	-N				50		
BOUL	04	1329	1340	1343D	N05	E72	.950	13750	10.0	14D	-N	2	P	1340	54	1.5	
RAMY	04	1329	1341	1343D	N07	E74	.960	13750	10.1	14D	-N	4	C		54		DE
TEHR	04	1332	1342	1351	N06	E76	.969	13750	10.3	19	-N	2	C		48		F
MCMA	04	1333	1339	1407	N07	E74	.960	13750	10.1	34	-N		C	1339	40	1.5	D
CATA	04	1335	1340	1410	N06	E72	.950	13750	10.0	35	1N	3		1340	112		
ATHN	04	1335	1339	1347	N05	E75	.965	13750	10.2	12	-B	3	C		48		F
ATHN	04	1335	1339D	1339D	N05	E75	.965	13750	10.2	4D	-B	3	V		48		F
RAMY	04	1341E	1342	1408D	N06	E75	.965	13750	10.2	27D	-N	4	V		48		DE
GRP62306	04	1443+2	1447+3	1500D	N07	E72	.950	13750	10.0	17	-N						D
MCMA	04	1443	1447	1500	N07	E73	.955	13750	10.1	17	-F		C	1447	30	1.1	D
CATA	04	1445	1450	1530D	N07	E72	.950	13750	10.0	45D	1N	3		1450	84		
GRP62307	04	1505+0	1506+4	1511	N02	W55	.819	13738	30.5	6	-N						H
MCMA	04	1505	1506	1511	N02	W55	.819	13738	30.5	6	-B		C	1506	100	1.8	DH
BOUL	04	1505	1510	1516	N02	W54	.809	13738	30.6	11	-F	2	C	1510	64	1.1	H
ATHN	04	1509E	1509U	1511	N03	W55	.818	13738	30.5	20	-N	2	C		32		F H
GRP62308	04	1551+4	1554+2	1603	N05	E73	.955	13750	10.1	12	-F				25		DH
MCMA	04	1551	1554	1605	N07	E72	.950	13750	10.1	14	-N		C	1554	30	1.1	DH
ATHN	04	1553	1556	1601	N04	E74	.960	13750	10.2	8	-F	3	V		16		DE
ATHN	04	1553	1556	1601	N04	E74	.960	13750	10.2	8	-F	3	C		16		DE
CATA	04	1555	1555	1615	N07	E71	.944	13750	10.0	20	-N	3		1555	56		
	04	1724	1734	NO FLARE PATROL													
309 PALE	04	1911E	1913U	1923D	N06	E75	.965	13750	10.4	12D	-F	2	C		38		DE
	04	2215	2230	NO FLARE PATROL													
310 BOUL	05	1355	1357	1400	N05	W70	.939	13738	30.3	5	-F	2	C	1357	11	.3	
GRP62311	05	1817+7	1823+3	1832	N05	W73	.955	13738	30.3	15	-F				70		H
RAMY	05	1817	1826	1832	N05	W73	.955	13738	30.3	15	-F	3	C		54		H
BOUL	05	1817	1823	1839	N04	W72	.950	13738	30.4	22	1F	2	C	1823	75	2.1	B
HTPR	05	1820		1828D	N05	W75	.965	13738	30.1	8D	-F		C	1825	60		
PALE	05	1824	1825	1832	N07	W71	.944	13738	30.4	8	-F	3	C		90		H
	05	2100	2116	NO FLARE PATROL													
	05	2136	2147	NO FLARE PATROL													
312 ARCE	06	0830E		0850D	S07	E30	.525	13753	8.6	20D	-F		C	0835	32	.4	H
	06	2341	2343	NO FLARE PATROL													
313 HURB	07	0717	0720	0735	N07	E39	.629	13750	10.2	18	-N						
314 HURB	07	0741	0743	0747	N07	E39	.629	13750	10.2	6	-F						
315 MONT	07	0813	0819	0825	N05	W90	1.000	13738	30.6	12	-F		C	0819	20		
316 MONT	07	1008	1010	1016	N03	E35	.573	13750	10.0	8	-F		C	1010	20		H

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
					APPROX												
	DATE 1975 JUL	START	MAX. PHASE	END	LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN		CONF	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
	07	2245	2258	NO FLARE PATROL													
	07	2345	2357	NO FLARE PATROL													
	08	0138	0147	NO FLARE PATROL													
GRP62317	08	0551+4	0555+4	0603	N05	E25	.422	13750	10.1	12	-F				25	.3	
ATHN	08	0551	0555	0558	N05	E25	.422	13750	10.1	7	-F	4	C		16		F
HTPR	08	0555	0559	0607	N06	E25	.423	13750	10.1	12	-F		C	0559	30	.3	E
318 HURB	08	0621	0622	0632	N06	E26	.439	13750	10.2	11	-F						
319 HTPR	08	1700	1712	1730	N10	W87	.998	13757	2.2	30	-F		C	1712	10		
	08	2129	2147	NO FLARE PATROL													
	08	2233	2316	NO FLARE PATROL													
GRP62320	09	0228+3	0231+4	0245	N06	E11	.194	13750	9.9	17	-F				70	.7	
PALE	09	0228	0231	0246	N06	E08	.144	13750	9.7	18	-N	3	C		90		DE
TEHR	09	0231	0235	0245	N06	E12	.211	13750	10.0	14	-F	2	C		58		
TEHR	09	0235E	0235U	0245	N06	E12	.211	13750	10.0	100	-F	2	V		60		
321 HURB	09	0805	0812	0822	N04	E13	.225	13750	10.3	17	? F						
	IMP-1 NO		HTPR2	CATA2	TEHR1	KIEV1											
322 TEHR	09	0815	0818	0823	S12	W38	.655		6.5	8	-N	3	C		8		DE
GRP62323	09	1108+0	1110>9	1150	N08	E06	.128	13750	9.9	42	-F				60	.6	EK
RAMY	09	1042	1117U	1120D	N08	E06	.128	13750	9.9	38D	-F	4	C		54		F
HTPR	09	1108	1113	1150	N06	E05	.096	13750	9.8	42	-F		C	1113	60	.6	EK
MCMA	09	1108	1110	1149	N08	E07	.142	13750	10.0	41	-N		C	1110	50	.5	E
KHAR	09	1112E	1114	1150D	N09	E07	.152	13750	10.0	38D	1F		C	1117	275	2.9	E
CATA	09	1115E	1120	1205	N09	E06	.139	13750	9.9	50D	-F	3		1120	56	.6	
324 HTPR	10	0907	0909	0916	S10	E07	.267	13751	10.9	9	-F		C	0909	20	.2	E
325 ARCE	10	0910E		0917D	S10	W08	.275		9.8	7D	-N		P	0910	29	.3	
326 MCMA	10	1553E	1553	1600	N05	W15	.259	13750	9.5	7D	-N		C	1553	35	.4	D
327 MCMA	10	1647		1654D	N05	W15	.259	13750	9.6	7D	-N		C	1650	25	.3	D
GRP62328	10	1657+0	1659+0	1701	N07	W18	.312	13750	9.4	4	-N				20	.2	
ATHN	10	1657	1659	1701	N07	W18	.312	13750	9.4	4	-N	3	V		16		DE
ATHN	10	1657	1659	1701	N07	W18	.312	13750	9.4	4	-N	3	C		16		DE
GRP62329	10	2059	2101+0 2107	2112	N06	W18	.310	13750	9.5	13	-N				70	.7	D
MCMA	10	2059	2107	2112	N05	W17	.292	13750	9.6	13	-N		C	2107	30	.4	D
PALE	10	2100E	2101	2111D	N06	W19	.326	13750	9.5	11D	-N	3	V		71		
PALE	10	2100E	2101U	2111D	N06	W19	.326	13750	9.5	11D	-F	3	C		71		DE
	10	2122	2214	NO FLARE PATROL													
	10	2219	2232	NO FLARE PATROL													
	11	0022	0045	NO FLARE PATROL													
	11	0105	0120	NO FLARE PATROL													
330 CATA	11	0605E	0610	0615D	N03	W18	.309	13750	9.9	10D	-F	3		0610	56	.6	
GRP62331	11	0911+2	0914+3	0931	S11	E66	.923	13764	16.3	20	-N						R
HTPR	11	0911	0915	0940	S11	E68	.935	13764	16.5	29	-N		C	0915	40	.9	E
ATHN	11	0913E	0916	0924	S12	E66	.924	13764	16.3	11D	-N	4	C		80		F R
ZURI	11	0913	0917	0931	S10	E64	.908	13764	16.2	18	-N		C	0917	51		
TEHR	11	0913	0917	0925	S10	E64	.908	13764	16.2	12	-N	4	C		88		DE
KHAR	11	0914E	0914	0940D	S12	E67	.930	13764	16.4	26D	1F		C	0914	110		
TEHR	11	0914E	0917	0925	S11	E64	.909	13764	16.2	11D	-N	4	V		80		DE
MONT	11	0917D	0917	0924	S11	E68	.935	13764	16.5	7D	-F		C	0917	40		D
LOCA	11	0922E	0922	0940	S12	E65	.917	13764	16.3	18D	1N		V	0922	101	2.8	
332 HTPR	11	0946	0949	0953	S11	E66	.923	13764	16.4	7	-F		C	0949	20	.4	E
GRP62333	11	1642+3	1645+3	1656	S08	E61	.883	13764	16.3	14	-F				20	.4	ER
HTPR	11	1642	1645	1657	S08	E65	.913	13764	16.6	15	-F		C	1645	10	.2	E
ATHN	11	1645	1648	1654	S09	E58	.859	13764	16.0	9	-F	3	C		32		DE R
334 HTPR	11	1749	1753	1810	N06	W25	.422	13750	9.9	21	-F		C	1753	20	.2	
335 MCMA	11	2032E		2038D	N07	W26	.439	13750	9.9	6D	-N		P	2032	25	.3	D
	11	2249	2307	NO FLARE PATROL													

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. FROM CMD	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
	12	0111	0123	NO FLARE PATROL													
	12	0135	0145	NO FLARE PATROL													
336 TACH	12	0349	0351	0400	N06	W32	.529	13750	9.8	11	-N		C		106	1.3	E
337 HTPR	12	0636	0645	0706	N04	W33	.543	13750	9.8	30	-F		C	0645	20	.2	E
GRP62338	12	0710+2	0724+1	0734	N03	W33	.544	13750	9.8	24	-F						E
CATA	12	0710	0725	0740	N03	W33	.544	13750	9.8	30	-F	3		0725	56	.7	
HTPR	12	0712	0724	0728	N04	W34	.558	13750	9.8	16	-F		C	0724	20	.2	E
GRP62339	12	0803+1	0806+1	0811D	S12	W13	.351	13763	11.4	8	-F				20	.2	
HTPR	12	0803	0806	0845	S11	W13	.339	13763	11.4	42	-F		C	0806	20	.2	
ATHN	12	0804	0807	0811	S13	W13	.364	13763	11.4	7	-F	4	V		16		DE
GRP62340	12	1042+3	1047+0	1057	S11	E49	.777	13764	16.1	15	-F				25	.4	
RAMY	12	1042	1047U	1057D	S12	E50	.790	13764	16.2	150	-F	4	C		27		DE
HTPR	12	1045	1047	1056	S11	E49	.777	13764	16.1	11	-F		C	1047	20	.2	
341 ATHN	12	1142	1145	1154	S12	E49	.780	13764	16.2	12	-F	4	V		32		DE
342 HTPR	12	1341	1344	1355	S11	E48	.767	13764	16.2	14	-F		C	1344	10	.1	
343 HTPR	12	1405	1409	1423	S11	E48	.767	13764	16.2	18	-F		C	1409	20	.3	
GRP62344	12	1653>9	1701+5	1715	S12	E46	.748	13764	16.2	22	-F				20	.3	Z
RAMY	12	1653	1701U	1717D	S13	E47	.762	13764	16.2	240	-F	4	C		27		Z
HTPR	12	1705	1706	1712	S11	E46	.745	13764	16.2	7	-F		C	1706	10	.1	
345 PALE	12	2201	2206	2227	N06	W38	.614	13750	10.1	26	-F	3	C		15		
	12	2300	2302	NO FLARE PATROL													
	12	2357	0000	NO FLARE PATROL													
	13	0050	0100	NO FLARE PATROL													
346 CULG	13	0216E	0217	0219D	N02	W42	.669	13750	9.9	30	-F		P	0217	30	.4	
GRP62347	13	1024+1	1030+1	1042	S09	E37	.631	13764	16.2	18	-N						E
LOCA	13	1015E	1015	1035	S08	E38	.640	13764	16.3	200	-N		V	1015	51	.7	
TEHR	13	1024	1031	1046	S07	E37	.623	13764	16.2	22	-N	4	C		20		DE
MEUD	13	1024		1038	S09	E37	.631	13764	16.2	14	-F		C	1028	40	.5	E
CATA	13	1025	1030	1050	S11	E36	.628	13764	16.1	25	-N	3		1030	84	1.1	
348 CATA	13	1025	1115	1155D	S10	E90	1.000	13766	20.2	900	? F	1		1115	56		
	IMP+2	BSL	KHAR														
349 MEUD	13	1127	1129	1135	N02	W46	.719	13750	10.0	8	-F		C	1129	30	.5	D
GRP62350	13	1326+3	1333+6	1351	S07	E36	.610	13764	16.3	25	-F				30	.4	DL
MCMA	13	1326	1333	1352	S08	E36	.614	13764	16.3	26	-N		C	1333	25	.3	DL
BOUL	13	1327	1339	1359	S07	E35	.597	13764	16.2	32	-F	2	C	1339	32	.4	
MEUD	13	1328	1333	1345	S08	E36	.614	13764	16.3	17	-F		C	1333	30	.4	D
TEHR	13	1328	1339U	1352D	S06	E37	.620	13764	16.3	240	-F	3	C		30		
RAMY	13	1329	1335	1347	S05	E35	.590	13764	16.2	18	-F	3	C		27		DE
KHAR	13	1330E	1337	1343D	S08	E35	.601	13764	16.2	130	-F		P	1337	110	1.4	D
TEHR	13	1339E	1339U	1352D	S04	E38	.627	13764	16.4	130	-F	3	V		40		
351 RAMY	13	1354	1355U	1355D	N01	W50	.766	13750	9.8	10	-F	4	C		27		DE
GRP62352	13	1608+0	1614+4	1648	N04	W51	.776	13750	9.8	40	1N				210	3.3	FLU
MEUD	13	1608	1614	1640	N03	W50	.765	13750	9.9	32	1N		C	1614	300	4.8	F
MCMA	13	1608	1615	1650	N03	W52	.787	13750	9.8	42	1B		C	1615	200	3.3	EL
BOUL	13	1608	1616	1702	N02	W48	.743	13750	10.1	54	1N	2	C	1616	150	2.3	
RAMY	13	1608	1617	1655	N03	W53	.798	13750	9.7	47	1B	4	C		198		F
RAMY	13	1614E	1618	1642	N05	W51	.775	13750	9.9	280	1B	3	V		180		F
WENO	13	1615		1643	N04	W52	.787	13750	9.8	28	1N		P		500	8.2	
PALE	13	1638E	1638U	1651	N05	W50	.764	13750	9.9	130	-N	2	V		140		U F
353 PALE	13	2056	2058	2100D	N05	W53	.797	13750	9.9	40	-N	2	C		30		F
	13	2236	2240	NO FLARE PATROL													
354 ABST	14	0715	0718	0721	S07	W86	.998	13767	7.9	6	? F		C	0718	79		DGJ
	IMP+1	NO	CATA2	MONT2	TEHR1												

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX. LAT.	APPROX. LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONS.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	
GRP62355	14	0807	0819+4	0850	N04	W60	.865	13750	9.8	43	-N				35	.7	E
MONT	14	0807	0819	0844	N04	W60	.865	13750	9.8	37	-F		C	0819	40		E
UPIC	14	0815E	0820U	0831D	N05	W61	.873	13750	9.8	16D	-F		P	0820	41		
TEHR	14	0818E	0823U	0850	N04	W60	.865	13750	9.8	32D	-B	3	V		32		DE
TEHR	14	0818E	0823U	0850	N04	W60	.865	13750	9.8	32D	-B	3	C		32		DE
GRP62356	14	1047+3	1052+1 1100	1107	N03	W62	.882	13750	9.8	20	-N				70	1.5	FH
TEHR	14	1047	1052	1105	N03	W64	.898	13750	9.6	18	-B	2	C		104		F H
MEUD	14	1049	1053	1110	N02	W60	.865	13750	10.0	21	-N		C	1053	50	1.0	
ZURI	14	1049	1053	1105	N02	W61	.874	13750	9.9	16	-N		C	1053	61	1.3	
RAMY	14	1050	1052	1103	N02	W60	.865	13750	10.0	13	-B	3	C		81		H
MONT	14	1050	1053	1101	N03	W62	.882	13750	9.8	11	-N		C	1053	70		E
TEHR	14	1053E	1100U	1110	N02	W65	.906	13750	9.6	17D	-B	3	V		96		F H
CATA	14	1105E	1105	1120	N04	W60	.865	13750	10.0	15D	-F	3		1105	28	.6	
357 HURB	14	1150	1156	1202	N10	W56	.827	13750	10.3	12	-N						
358 HURB	14	1208	1208	1218	N10	W56	.827	13750	10.3	10	-N						
359 UPIC	14	1520	1525U	1530	N05	W64	.897	13750	9.8	10	-F		P	1525	41		
	14	1944	2013	NO FLARE PATROL													
	14	2027	2303	NO FLARE PATROL													
360 MANI	15	0107E	0107U	0125	N06	W70	.938	13750	9.8	18D	-F	3	P	0107	50	1.1	
361 ABST	15	0436	0441	0448	S10	E65	.916	13766	20.1	12	-F		C	0441	87	2.0	DJ
362 ATHN	15	0453	0455	0504	N05	W71	.944	13750	9.9	11	-F	4	C		16		DE
GRP62363	15	0644+1	0653+0	0701	S09	E65	.915	13766	20.2	17	-F						DJ
HTPR	15	0644	0653	0700	S08	E66	.920	13766	20.2	16	-F		C	0653	20	.4	
ABST	15	0645	0653	0702	S10	E65	.916	13766	20.2	17	-F		C	0653	79	1.8	DJ
GRP62364	15	0820+2	0820+3	0835	S14	E64	.914	13766	20.1	15	-F						E
CATA	15	0820	0820	0835	S15	E64	.915	13766	20.1	15	-N	3		0820	56		
HTPR	15	0822	0823	0834	S13	E65	.919	13766	20.2	12	-F		C	0823	10	.2	E
GRP62365	15	1014+0	1014+3	1025	S09	E63	.900	13766	20.2	11	-N				50	1.1	E
HTPR	15	1014	1017	1030	S10	E64	.909	13766	20.2	16	-N		C	1017	50	1.0	E
ZURI	15	1014	1014	1020	S08	E63	.899	13766	20.2	6	-N		C	1014	51	1.2	
366 HTPR	15	1106	1107	1117	S10	E66	.922	13766	20.4	11	-F		C	1107	10	.2	
GRP62367	16	0840+8	0849+1	0854	S07	E49	.768	13766	20.0	14	-F				45	.7	EU
ARCE	16	0840	0850	0900	S09	E50	.784	13766	20.1	20	-N		C	0850	45	.7	
ATHN	16	0846E	0849	0853	S07	E49	.768	13766	20.0	7D	-F	4	C		48		U
ATHN	16	0846E	0849	0853	S07	E49	.768	13766	20.0	7D	-F	4	V		48		U
MONT	16	0847	0849	0852	S06	E49	.766	13766	20.0	5	-F		C	0849	40		D
MEUD	16	0848		0852	S07	E47	.746	13766	19.9	4	-F		C	0848	50	.8	E
HTPR	16	0848	0850	0857	S07	E48	.757	13766	20.0	9	-N		C	0850	30	.5	E
368 HTPR	16	0907	0907	0912	S07	E48	.757	13766	20.0	5	-F		C	0907	30	.5	D
369 HTPR	16	0951	0955	1010	S07	E46	.735	13766	19.9	19	-F		C	0955	50	.8	
370 PALE	16	2333	2341	2358	S16	E41	.712	13766	20.1	25	-N	3	C		41		DE S
	17	0218	0230	NO FLARE PATROL													
371 CATA	17	0900	0900	0915	S12	E36	.635	13766	20.1	15	-N	3		0900	28	.4	
GRP62372	17	1319+1	1322+1	1328	S05	E34	.577	13766	20.1	9	-N				30	.4	
ATHN	17	1319	1323	1329	S06	E34	.581	13766	20.1	10	-N	4	V		32		F
ATHN	17	1319	1323	1329	S06	E34	.581	13766	20.1	10	-N	4	C		32		F
MCMA	17	1320	1322	1327	S05	E35	.591	13766	20.2	7	-N		C	1322	25	.3	E
RAMY	17	1320	1323	1327	S04	E35	.588	13766	20.2	7	-F	4	C		27		DE
GRP62373	18	0017E		0039	S14	E29	.563	13766	20.2	22	-F				90	1.1	F
MITK	18	0017		0039	S12	E30	.561	13766	20.3	22	-N		C	0017	110	1.4	
PALE	18	0018E	0019U	0019D	S16	E28	.567	13766	20.1	10	-F	1	C		80		F
	18	0126	0140	NO FLARE PATROL													
	18	0150	0215	NO FLARE PATROL													
374 PALE	18	0428E	0432U	0433D	S08	E23	.441	13766	19.9	5D	-F	2	C		49		U F

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
375 BUCA	19	0625		0705	S11	E12	.337	13766	20.2	40	-F		C	0625	107	1.2	U
376 MANI	20	0315	0315	0316D	S06	W01	.188	13766	20.1	1D	-N	3	P	0315	70	.7	F
377 PALE	20	1847	1849	1857	S08	W13	.312	13766	19.8	10	-N	3	C		17		DE
	20	2146	2149	NO FLARE PATROL													
	20	2156	2203	NO FLARE PATROL													
	20	2223	2230	NO FLARE PATROL													
GRP62378	21	0307>9	0310	0344	N04	E86	.997	13777	27.6	37	-N						DJZ
TEHR	21	0307E	0310U	0335D	N02	E86	.997	13777	27.6	28D	-N	3	V		20		DE
TACH	21	0318		0344	N07	E86	.997	13777	27.6	26	-N		V	0338	71		DJZ
379 TEHR	21	0610E	0620U	0633	N08	E87	.998	13777	27.8	23D	-F	3	V		12		
380 TEHR	21	0708E	0716U	0720D	N02	E84	.994	13777	27.6	12D	-F	2	V		8		
GRP62381	21	0754+1	0757+2 0805	0810	N02	E82	.990	13777	27.5	16	-N						D
HONT	21	0754	0757	0807	N04	E79	.981	13777	27.3	13	-F		C	0757	20		D
ABST	21	0754	0759	0820	N02	E88	.999	13777	27.9	26	1N		C	0759	96		D
BUCA	21	0755		0800	N04	E85	.996	13777	27.7	5	1N		P	0800	107		
CATA	21	0755	0805	0815	N04	E80	.984	13777	27.3	20	1N	3		0805	84		
ATHN	21	0755	0758	0807	S01	E80	.985	13777	27.3	12	-N	3	V		32		DE
ATHN	21	0755	0758	0807	S01	E80	.985	13777	27.3	12	-N	3	C		32		DE
GRP62382	21	1530+3	1532+2	1538	S09	W25	.477	13766	19.8	8	-F				40	.5	D
MCMA	21	1530	1532	1540	S09	W25	.477	13766	19.8	10	-N		C	1532	40	.4	D
HUAN	21	1531		1537	S09	W25	.477	13766	19.8	6	-F	1	C				
MEUD	21	1533	1534	1538	S09	W25	.477	13766	19.8	5	-F		C	1534	40	.5	D
GRP62383	21	1711+3	1713+1	1720	N03	E78	.977	13777	27.6	9	-F				35		D
HUAN	21	1711	1713	1719	N04	E79	.981	13777	27.6	8	-F	1	C	1713	25		D
MEUD	21	1714	1714	1720	N03	E78	.977	13777	27.6	6	-F		C	1714	40		D
GRP62384	22	0303E	0311	0348D	N03	E67	.919	13777	27.2	45	-F				50		DL
CULG	22	0303E	0311	0322D	N03	E66	.912	13777	27.1	19D	-F		C	0311	40	1.0	
TACH	22	0314		0348	N04	E69	.932	13777	27.3	34	-F		V	0314	7[illegible]		DL
385 HTPR	22	0526E	0528	0531D	N13	E66	.910	13777	27.2	5D	-N		C	0528	10	.2	D
386 ARCE	22	0825E		0935D	S03	W34	.572	13766	19.8	70D	-F		C	0840	38	.5	H
387 HTPR	22	1005	1008	1027	N09	E69	.931	13777	27.6	22	-N		C	1008	30		
GRP62388	22	1205+6	1215+1	1230	N09	E68	.924	13777	27.6	25	-N				35		E
MCMA	22	1205	1215	1235	N09	E68	.924	13777	27.6	30	-N		C	1215	40	1.2	E
HTPR	22	1211	1216	1225	N09	E68	.924	13777	27.6	14	-N		C	1216	30		E
GRP62389	22	1250+1	1257+1	1310	N08	E68	.924	13777	27.6	20	-N				45		E
MCMA	22	1250	1257	1312	N09	E68	.924	13777	27.6	22	-N		C	1257	40	1.2	E
HTPR	22	1251	1258	1310	N09	E68	.924	13777	27.6	19	-N		C	1258	50		E
HUAN	22	1251		1303	N07	E68	.925	13777	27.6	12	-F	1	C				
390 HTPR	22	1400	1402	1415	N09	E68	.924	13777	27.7	15	-F		C	1402	20		
391 HTPR	22	1540	1544	1555	S06	W38	.636	13766	19.8	15	-F		C	1544	30	.4	
392 HUAN	22	1654		1658	N07	E68	.925	13777	27.8	4	-F	1	C				
	22	2342	2345	NO FLARE PATROL													
	23	0015	0036	NO FLARE PATROL													
	23	0054	0059	NO FLARE PATROL													
	23	0140	0145	NO FLARE PATROL													
	23	0150	0200	NO FLARE PATROL													
	23	0220	0232	NO FLARE PATROL													
393 HTPR	23	0539	0541	0545	N10	E58	.845	13777	27.6	6	-F		C	0541	30	.6	D
394 HTPR	23	0755	0803	0813	N09	E40	.641	13763	26.3	18	-F		C	0803	30	.4	DH

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP62395	23	0820>9	0830+8 0845	0853	N09	E39	.628	13783	26.3	33	-F				30	.4	DHR
ARCE	23	0820	0845	0925D	N10	E39	.629	13783	26.3	65D	-N		C	0845	32	.4	H
HTPR	23	0824	0830	0855	N09	E40	.641	13783	26.4	31	-N		C	0830	20	.3	OH
MONT	23	0828	0834	0852	N10	E39	.629	13783	26.3	24	-F		C	0834	20		
CATA	23	0830	0835	0900D	N10	E38	.615	13783	26.2	30D	-N	3		0835	28	.4	
ATHN	23	0835E	0838	0846	N07	E39	.627	13783	26.3	11D	-F	3	V		48		R
ATHN	23	0835E	0838	0846	N07	E39	.627	13783	26.3	11D	-F	3	C		48		R
GRP62396	23	1057+1	1057+0	1103	N08	E37	.600	13783	26.2	6	-F				30	.4	ER
ATHN	23	1057E	1057U	1103	N08	E37	.600	13783	26.2	6D	-F	3	C		32		DE R
ATHN	23	1057E	1057U	1103	N08	E37	.600	13783	26.2	6D	-F	3	V		32		DE R
HTPR	23	1058	1104	1107	N09	E37	.601	13783	26.2	9	-F		C	1104	20	.3	E
397 HTPR	23	1245	1256	1310	N09	E37	.601	13783	26.3	25	-F		C	1256	10	.1	D
398 MONT	23	1323	1326	1336	N10	E37	.602	13783	26.3	13	-F		C	1326	40		E
399 HTPR	23	1332	1332	1334	N08	E54	.806	13777	27.6	2	-F		C	1332	20	.4	E
GRP62400	23	1354E	1354	1357D	N08	E36	.586	13783	26.3	3	-F				20	.2	
ATHN	23	1354E	1354U	1357D	N08	E36	.586	13783	26.3	3D	-F	2	V		16		DE
ATHN	23	1354E	1354U	1357D	N08	E36	.586	13783	26.3	3D	-F	2	C		16		DE
GRP62401	23	1404+7	1406 1417+3	1425	N08	E36	.586	13783	26.3	21	-F				30	.4	DK
HTPR	23	1404	1417	1425	N08	E34	.558	13783	26.1	21	-N		C	1417	30	.4	DK
HTPR	23	1404	1406	1425	N08	E34	.558	13783	26.1	21	-N		C	1406	10	.1	DK
MONT	23	1410	1420	1425	N10	E37	.602	13783	26.4	15	-F		C	1420	20		D
HUAN	23	1410		1434	N08	E36	.586	13783	26.3	24	-F	1	C				
MEUO	23	1411		1424	N08	E36	.586	13783	26.3	13	-F		C	1413	50	.6	D
GRP62402	23	1503	1528+3 1540	1543	N09	E34	.559	13783	26.2	40	-F				30	.4	
HTPR	23	1503	1531	1543	N09	E34	.559	13783	26.2	40	-N		C	1531	40	.5	
ATHN	23	1526E	1528	1543	N09	E34	.559	13783	26.2	17D	-F	3	C		32		DE
ATHN	23	1526E	1528	1543	N09	E34	.559	13783	26.2	17D	-F	3	V		32		DE
CATA	23	1530	1540	1555	N09	E36	.587	13783	26.3	25	-N	3		1540	28	.4	
GRP62403	23	1551>9	1556 1611	1617	N08	E35	.572	13783	26.3	26	-F						D
HTPR	23	1551	1556	1620	N09	E34	.559	13783	26.2	29	-N		C	1556	30	.4	D
HUAN	23	1609	1611	1614	N08	E36	.586	13783	26.4	5	-F	1	C	1611	30	.4	
404 HTPR	23	1627	1642	1651	N09	E34	.559	13783	26.2	24	-F		C	1642	20	.2	
405 HTPR	23	1657	1703	1706D	N09	E33	.544	13783	26.2	9D	-N		C	1703	20	.2	
406 PALE	23	1747	1758	1804	N09	E33	.544	13783	26.2	17	-F	3	C		17		
407 HUAN	23	1818	1820	1826	N08	E35	.572	13783	26.4	8	-F	1	C	1820	30	.4	
408 HUAN	23	1925	1937	1945	N08	E34	.558	13783	26.4	20	-F	1	C	1937	30	.4	
409 HUAN	23	1954		1957	N08	E34	.558	13783	26.4	3	-F	1	C				
410 HUAN	23	2118	2121	2128	N09	E34	.559	13783	26.4	10	-F	1	C	2121	25	.3	D
GRP62411	24	0630+5	0635	0650D	N10	E26	.442	13783	26.2	20	-F				40	.4	
BUCA	24	0630		0735	N10	E25	.426	13783	26.1	65	-F		C	0635	53	.6	
CATA	24	0635	0635	0650	N10	E27	.457	13783	26.3	15	-N	3		0635	28	.3	
412 CATA	24	0650	0655	0700	S10	W58	.864	13766	19.9	10	-F	3		0655	28	.6	
GRP62413	24	1030	1031	1040	N09	E41	.654	13777	27.5	10	-F						E
MONT	24	1030	1031	1040	N09	E41	.654	13777	27.5	10	-F		C	1031	40		E
HTPR	24	1034E	1034	1034D	N07	E41	.653	13777	27.5		-N		C	1034	10	.2	D
HTPR	24	1034E	1034	1034D	N11	E41	.656	13777	27.5		-N		C	1034	10	.2	D
414 HTPR	24	1157E	1200	1207D	S05	W60	.873	13766	20.0	10D	-N		C	1200	40		E

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT. °	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONC	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP62415	24	1434+4	1440+5	1504	N08	E40	.640	13777	27.6	30	1N						R
TEHR	24	1434	1443	1500D	N07	E40	.640	13777	27.6	26D	1N	2	C		210		
LOCA	24	1435	1440	1515	N08	E39	.627	13777	27.5	40	2N		P	1440	652	9.2	
MEUD	24	1436		1446	N08	E40	.640	13777	27.6	10	1N		C	1442	210	2.7	
ATHN	24	1436	1442	1456	N03	E43	.681	13777	27.8	20	-N	4	C		80		F
ATHN	24	1436	1442	1456	N03	E43	.681	13777	27.8	20	-N	4	V		80		F
RAMY	24	1437	1444U	1514	N10	E39	.629	13777	27.5	37	-B	4	C		153		F R
HUAN	24	1438	1441	1510	N09	E38	.614	13777	27.5	32	-N	2	C	1441	100	1.3	E
CATA	24	1440	1445	1455D	N10	E39	.629	13777	27.5	15D	1N	3		1445	196	2.6	
RAMY	24	1440E	1443U	1514D	N10	E39	.629	13777	27.5	34D	-B	4	V		162		DE
LVOV	24	1441	1443	1452	N09	E40	.641	13777	27.6	11	1N		C	1443	200	2.8	E
GRP62416	24	2043+2	2044	2053	N09	E36	.587	13777	27.6	10	-F						E
MCMA	24	2043	2044	2059	N10	E36	.588	13777	27.6	16	-N		C	2044	50	.6	E
HUAN	24	2045		2047	N08	E36	.586	13777	27.6	2	-F	1	C				
	24	2134	2215	NO FLARE PATROL													
GRP62417	25	0640>9	0702+3	0715	N08	E13	.228	13783	26.3	35	-N				90	1.0	FJKRU
ABST	25	0640	0704	0826	N06	E13	.224	13783	26.3	106	-N		P	0704	140	1.5	FJK
BUCA	25	0650		0800	N08	E11	.195	13783	26.1	70	-N		C	0702	107	1.2	
CATA	25	0655	0705	0715	N07	E12	.209	13783	26.2	20	-N	3		0705	56	.6	
ATHN	25	0658	0702	0709	N10	E14	.253	13783	26.3	11	-F	4	V		64		U R
ATHN	25	0658	0702	0709	N10	E14	.253	13783	26.3	11	-F	4	C		64		U R
418 KHAR	25	0806E	0806	0817D	N08	E12	.212	13783	26.2	11D	-F		C	0806	110	1.2	DT
GRP62419	25	0813+2	0818+1	0828	S03	W73	.958	13766	19.9	15	-F				40		D
ABST	25	0813	0819	0826	S04	W78	.980	13766	19.5	13	-F		P	0819	70		D
ATHN	25	0815	0818	0828	S02	W70	.941	13766	20.1	13	-F	4	C		32		DE
ATHN	25	0815	0818	0828	S02	W70	.941	13766	20.1	13	-F	4	V		32		DE
420 KHAR	25	1120E	1120	1158D	N08	E09	.163	13783	26.1	38D	-F		C	1120	160	1.7	ET
421 HUAN	25	1413		1431	N08	E08	.146	13783	26.2	18	-F	1	C				
422 HUAN	25	1447		1525	N08	E08	.146	13783	26.2	38	-F	1	C	1451	40	.4	
423 PALE	25	1756	1758	1804D	N09	E05	.109	13783	26.1	8D	-F	3	C		31		DE
424 HUAN	25	1833		1843	N08	E06	.115	13783	26.2	10	-F	1	C				
425 HUAN	25	1905		1942	N08	E05	.099	13783	26.2	37	-F	1	C	1907	40	.4	
GRP62426	25	2334+2	2336+2	2355	S09	W76	.975	13766	20.3	21	-F				50		F
CULG	25	2334E	2336	2355D	S11	W77	.979	13766	20.2	21D	-F		C	2336	40	1.6	
PALE	25	2336	2338	2345	S07	W74	.965	13766	20.4	9	-N	3	V		59		
MANI	25	2345E	2345U	2356	S09	W77	.978	13766	20.2	11D	-F	2	V	2345	60	1.5	F
GRP62427	26	0653+3	0655+6	0707	N07	W02	.046	13783	26.1	14	-F				40	.4	DHJZ
HTPR	26	0653	0657	0703	N08	W02	.058	13783	26.1	10	-F		C	0657	40	.4	
ATHN	26	0654	0657	0707	N07	W01	.034	13783	26.2	13	-N	5	V		32		DE H
CATA	26	0655	0655	0705	N07	W01	.034	13783	26.2	10	-F	3		0655	28	.3	
ABST	26	0656	0659	0719	N08	W02	.058	13783	26.1	23	-F		C	0659	87	.9	DJ
TEHR	26	0656	0701	0709	N06	W02	.037	13783	26.1	13	-F	4	C		48		DE Z
GRP62428	26	0730+0	0731+1	0741	S10	W90	1.000	13766	19.6	11	-F				20		
HTPR	26	0730	0732	0745	S11	W90	1.000	13766	19.6	15	-F		C	0732	20		
MONT	26	0730	0731	0736	S09	W90	1.000	13766	19.6	6	-F		C	0731	20		
429 MONT	26	0823	0826	0828	S09	W87	.999	13766	19.8	5	-F		C	0826	20		
430 MEUD	26	0829	0832	0850	S10	W90	1.000	13766	19.6	21	-F		C				
431 HUAN	26	1734		1740	N08	W10	.179	13783	26.0	6	-F	1	C				
432 HUAN	26	1826		1832	N08	W10	.179	13783	26.0	6	-F	1	C				
433 PALE	27	0251	0258	0311	N09	W12	.215	13783	26.2	20	-F	3	V		89		F
434 ABST	27	0818	0827	0840	N08	W15	.261	13783	26.2	22	-F		P	0827	87	.9	DJ
435 HUAN	27	1639	1639	1641	N06	W18	.308	13783	26.3	2	-F	1	C	1639	25	.3	D
436 MCMA	27	1815	1821	1825	N09	W19	.329	13783	26.3	10	-F		C	1821	30	.3	EH
437 CATA	28	0830	0830	0840	N07	W16	.275	13777	27.2	10	-F	3		0830	28	.3	

Hα SOLAR FLARES

JULY 1975

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT. °	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP62438	28	0915+9	0925+0	0929	N07	W34	.557	13783	25.8	14	-F				25	.3	
CATA	28	0915	0925	0930	N07	W35	.571	13783	25.8	15	-F	3		0925	28	.4	
MONT	28	0924	0925	0927	N08	W34	.557	13783	25.8	3	-F		C	0925	20		
GRP62439	28	1655+0	1658+1	1710	N08	W36	.585	13783	26.0	15	-F				40	.5	E
RAMY	28	1655	1658	1713	N07	W36	.585	13783	26.0	18	-F	4	C		27		DE
MCMA	28	1655	1659	1703	N08	W35	.571	13783	26.1	8	-F		C	1659	50	.6	E
HUAN	28	1655		1710	N08	W37	.599	13783	25.9	15	-F	1	C				
GRP62440	28	1818+2	1822+3	1835	N08	W33	.543	13783	26.3	17	-F				25	.3	D
RAMY	28	1818	1822U	1836	N07	W33	.542	13783	26.3	18	-F	3	C		20		DE
HUAN	28	1819		1833	N08	W33	.543	13783	26.3	14	-F	1	C				
MCMA	28	1820	1825	1835	N08	W33	.543	13783	26.3	15	-F		C	1825	30	.4	D
GRP62441	28	1905+1	1908+1	1916	N08	W33	.543	13783	26.3	11	-N				70	.8	DH
MCMA	28	1905	1908	1916	N08	W33	.543	13783	26.3	11	-B		C	1908	60	.7	DH
BOUL	28	1906	1909	1917	N07	W32	.528	13783	26.4	11	-F	1	C	1909	86	1.0	
RAMY	28	1906	1908U	1917	N07	W33	.542	13783	26.3	11	-N	4	C		90		DE H
PALE	28	1911E	1911	1916	N09	W34	.558	13783	26.2	5D	-F	3	V		46		DE
PALE	28	1911E	1911	1916	N09	W34	.558	13783	26.2	5D	-F	3	C		46		DE
GRP62442	28	1956+1	2000+1	2009	N09	W35	.572	13783	26.2	13	-B				50	.6	EL
PALE	28	1956	2001	2009	N09	W35	.572	13783	26.2	13	-B	2	C		50		DE
PALE	28	1956	2001	2009	N09	W35	.572	13783	26.2	13	-B	2	V		50		DE
MCMA	28	1957	2000	2010	N08	W34	.557	13783	26.3	13	-N		C	2000	50	.6	EL
	28	2046	2058	NO FLARE PATROL													
	28	2105	2148	NO FLARE PATROL													
GRP62443	29	0206E	0210+2	0223D	N08	W42	.666	13783	25.9	17	-F				40	.5	F
MANI	29	0206E	0212	0223D	N08	W43	.679	13783	25.9	17D	-N	3	P	0212	40	.6	F
CULG	29	0208E	0210	0215D	N08	W42	.666	13783	25.9	7D	-F		C	0210	40	.5	
444 ATHN	29	0503	0507	0515	N11	W40	.642	13783	26.2	12	-F	4	C		64		F H
GRP62445	29	0740+5	0743+2	0752	N08	W49	.751	13783	25.6	12	-F				30	.5	D
ATHN	29	0740E	0744	0753	N08	W51	.774	13783	25.5	13D	-F	4	C		32		
HURB	29	0743	0743	0750	N10	W45	.704	13783	25.9	7	-N						D
MONT	29	0744	0745	0750	N08	W50	.762	13783	25.6	6	-F		C	0745	20		
CATA	29	0745	0745	0755	N08	W50	.762	13783	25.6	10	-N	3		0745	28	.4	
MEUD	29	0745	0745	0750	N08	W51	.774	13783	25.5	5	-F		C	0745	30	.5	D
BUCA	29	0745		0800	N08	W48	.740	13783	25.7	15	-F		C	0745	53	.8	D
446 MEUD	29	0943	0943	0945	N08	W52	.784	13783	25.5	2	-F		C	0943	30	.5	D
447 MEUD	29	1032	1032	1035	N07	W43	.679	13783	26.2	3	-F		C	1032	40	.5	
GRP62448	29	1218+2	1222+3	1236	N08	W52	.784	13783	25.6	18	-N				70	1.1	H
MCMA	29	1218	1222	1240	N07	W54	.806	13783	25.5	22	-B		C	1222	100	1.8	H
HTPR	29	1220	1222	1232	N08	W54	.805	13783	25.5	12	-N		C	1222	50	.9	
MEUD	29	1220	1223	1232	N08	W53	.795	13783	25.5	12	-N		C	1223	70	1.2	
TEHR	29	1220	1224	1230	N09	W46	.716	13783	26.1	10	-F	3	C		80		DE
CATA	29	1220	1225	1240	N08	W54	.805	13783	25.5	20	-N	3		1225	5	.1	
WEND	29	1220		1240	N09	W53	.795	13783	25.5	20	1N		V		300	5.0	
449 MCMA	29	1800	1804	1810	N07	W57	.835	13783	25.5	10	-F		C	1804	30	.6	D
	30	0131	0137	NO FLARE PATROL													
	30	0146	0200	NO FLARE PATROL													
450 MEUD	30	1030	1030	1036	N11	W59	.853	13783	26.0	6	-F		C	1030	40	.8	D
451 HURB	30	1038	1038	1044	N07	W56	.826	13783	26.2	6	-N						
452 HUAN	30	1627	1635	1639	N04	E77	.973	13786	5.5	12	-F	1	C	1635	20		D
453 HUAN	30	1655	1657	1704	N05	E78	.977	13786	5.6	9	-F	1	C	1657	20		D
	30	1907	1908	NO FLARE PATROL													
	30	1925	1936	NO FLARE PATROL													
	30	1940	1953	NO FLARE PATROL													
	30	2008	2016	NO FLARE PATROL													
454 PALE	31	0012	0015	0019	N04	E71	.944	13786	5.3	7	-F	3	V		15		DE
455 PALE	31	0104	0109	0113	N04	E71	.944	13786	5.4	9	-F	3	C		23		DE

Hα SOLAR FLARES

JULY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 JUL	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
456 PALE	31	0244	0247	0301D	N05	E70	.938	13786	5.4	17D	-F	2	C		19		U F
457 MANI	31	0303E	0305U	0305D	N06	W71	.943	13783	25.8	5D	-F	2	V	0305	40	.9	H
GRP62458	31	0401E	0403+0	0408D	N09	W63	.887	13783	26.4	7	-F				40	.9	
TEHR	31	0401E	0403	0408D	N09	W63	.887	13783	26.4	7D	-F	4	V		40		DE
TEHR	31	0401E	0403	0408D	N09	W63	.887	13783	26.4	7D	-F	4	C		40		DE
GRP62459	31	0402+2	0404+2	0408D	N04	E67	.919	13786	5.2	6	-F				35		R
MANI	31	0402E	0404	0408D	N04	E67	.919	13786	5.2	6D	-F	2	V	0404	40	.8	
ATHN	31	0404	0406U	0407D	N05	E68	.925	13786	5.3	3D	-N	1	V		32		DE R
460 CATA	31	0600E	0605	0615D	N05	E68	.925	13786	5.4	15D	-N	3		0605	5		
GRP62461	31	0633+2	0638+2	0700	N06	W74	.959	13783	25.7	27	-F				20		F
MANI	31	0633E	0638U	0643D	N05	W74	.959	13783	25.7	10D	-F	3	P	0638	30	.7	F
CATA	31	0635	0640	0700	N08	W74	.958	13783	25.7	25	-N	3		0640	5		
GRP62462	31	0713>9	0723	0810	N06	E69	.931	13786	5.5	57	-N						
HURB	31	0713	0723	0819	N05	E72	.949	13786	5.7	66	1B						
BUCA	31	0730		0800	N07	E67	.917	13786	5.3	30	-F		C	0740	85		
GRP62463	31	0835	0845	0915	N04	E65	.905	13786	5.2	40	-N						
ARCE	31	0835	0845	0915	N05	E66	.911	13786	5.3	40	-N		C	0845	51		
ARCE	31	0905E		0905D	N04	E64	.897	13786	5.2		-N	*	C	0905	29	.6	
464 ARCE	31	0845	0905	0925D	N09	W71	.942	13783	26.0	40D	-N		C	0905	41		
GRP62465	31	1047+3	1055	1150D	N06	E64	.896	13786	5.2	63	1F						E
			1133														
KHAR	31	1047E	1133	1150D	N06	E64	.896	13786	5.2	63D	1F		C				ET
CATA	31	1050	1055	1110D	N06	E64	.896	13786	5.3	20D	1N	3		1055	112	2.6	
466 HUAN	31	1249		1301	N05	E66	.911	13786	5.5	12	-F	1	C				
GRP62467	31	1302	1328+2	1359	N07	W70	.937	13783	26.3	57	-F				60		FH
ZURI	31	1302	1328	1352	N08	W74	.958	13783	26.0	50	-F		C	1328	61		
TEHR	31	1325E	1330U	1405	N06	W67	.918	13783	26.5	40D	-F	3	V		60		F H
GRP62468	31	1315E	1320+0	1410	S05	E65	.912		5.4	55	-N				50	1.2	FH
TEHR	31	1315E	1320U	1410	S05	E65	.912		5.4	55D	-N	3	C		50		F H
TEHR	31	1315E	1320U	1410	S05	E65	.912		5.4	55D	-N	3	V		50		F H
GRP62469	31	1414+4	1417+4	1434	N07	W74	.959	13783	26.0	20	-N				30		DH
BOUL	31	1414	1418	1430	N09	W74	.958	13783	26.0	16	-F	2	C	1418	32	1.0	
HUAN	31	1415	1417	1424	N10	W76	.967	13783	25.9	9	-F	1	C	1417	15		D
MEUD	31	1416	1418	1426	N10	W76	.967	13783	25.9	10	-N		C	1418	40		D
TEHR	31	1418	1421	1447	N03	W72	.950	13783	26.2	29	-B	3	V		24		DE H
TEHR	31	1418	1421	1447	N03	W72	.950	13783	26.2	29	-B	3	C		24		DE H
GRP62470	31	1507+4	1510+3	1517	N07	W75	.964	13783	26.0	10	-F				20		D
HTPR	31	1507	1510	1515	N08	W78	.976	13783	25.8	8	-F		C	1510	20		D
BOUL	31	1508	1510	1520	N09	W74	.958	13783	26.1	12	-F	2	C	1510	32	1.0	
HUAN	31	1508	1510	1517	N09	W78	.976	13783	25.8	9	-N	1	C	1510	15		D
TEHR	31	1511	1513U	1515D	N03	W72	.950	13783	26.2	4D	-N	1	C		24		DE
471 HUAN	31	1608	1609	1615	N04	E64	.897	13786	5.5	7	-F	1	C	1609	20	.4	D
472 HUAN	31	1619	1619	1629	N04	E64	.897	13786	5.5	10	-F	1	C	1619	35	.8	
473 HUAN	31	1637	1638	1639	N05	E64	.896	13786	5.5	2	-F	1	C	1638	20	.4	D
474 HUAN	31	1707	1714	1721	N04	E64	.897	13786	5.5	14	-N	1	C	1714	20	.4	D
GRP62475	31	1754+0	1805	1832	N05	E61	.872	13786	5.3	38	-F						D
HUAN	31	1754		1830	N05	E63	.889	13786	5.5	36	-F	1	C	1821	20	.4	D
PALE	31	1754	1805	1834	N06	E59	.854	13786	5.2	40	-N	3	C		22		DE
476 HUAN	31	1838	1843	1848	N05	E63	.889	13786	5.5	10	-F	1	C	1843	20	.4	D
477 HUAN	31	2011	2011	2012	N05	E62	.881	13786	5.5	1	-F	1	C	2011	20	.4	D
	31	2109	2226	NO FLARE PATROL													
GRP62478	31	2339E	2347	0002	N06	E56	.826	13786	5.2	23	-F						F
			2355														
PALE	31	2339E	2355	0002	N07	E56	.826	13786	5.2	23D	-F	3	C		60		F
MANI	31	2345E	2347U	2359D	N06	E57	.836	13786	5.3	14D	-F	2	V	2347	60	1.0	F

DAILY FLARE INDICES
Includes all Flares

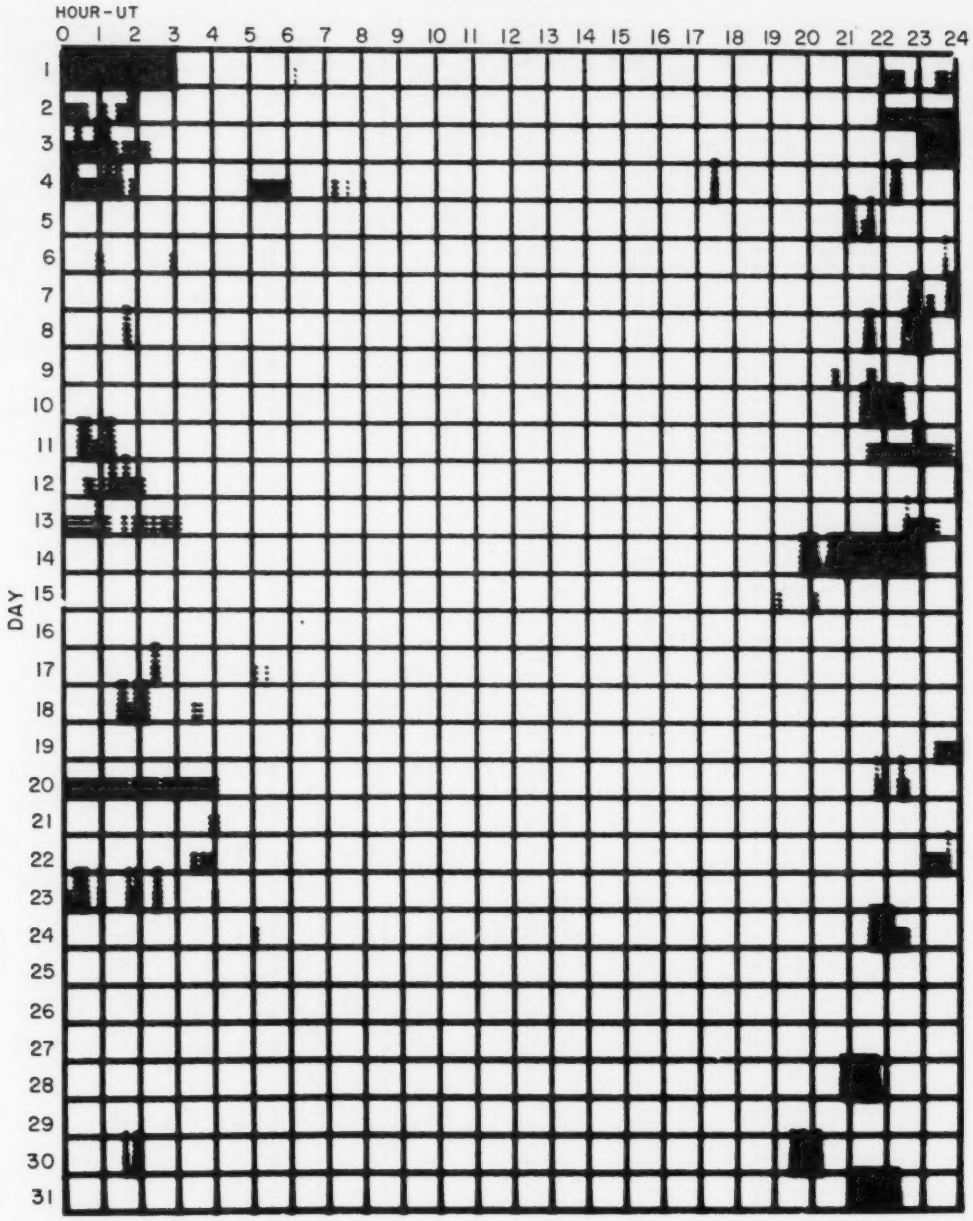
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
750701	.24	21.0	750712	19.98	23.6	750723	43.16	23.1
750702	57.26	23.8	750713	34.73	23.8	750724	25.10	23.3
750703	20.31	22.1	750714	8.76	20.9	750725	43.38	24.0
750704	11.41	23.2	750715	6.39	24.0	750726	13.30	24.0
750705	3.43	23.6	750716	6.77	24.0	750727	21.11	24.0
750706	3.38	24.0	750717	3.85	23.8	750728	10.95	23.1
750707	10.98	23.6	750718	9.75	23.4	750729	12.98	24.0
750708	6.63	22.8	750719	5.28	24.0	750730	4.50	23.1
750709	6.39	24.0	750720	10.66	23.7	750731	24.64	22.7
750710	24.72	22.9	750721	4.87	24.0			
750711	18.06	23.1	750722	13.17	24.0			

When no Flare Index is given, it is 0 for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

JULY 1975



Observatories included in total patrol:

Abastumani	Culgoora	Kharkov	McMath-Hulbert	Tachkent
Arcetri	Haute Provence	Kiev	Meudon	Tehran
Athenes	Herstmonceux	Kodaikanal	Mitaka	Upice
Boulder	Huancayo	Locarno	Monte Mario	Voroshilov
Bucharest	Hurbanovo	Lvov	Palehua	Wendelstein
Catania	Istanboul	Manila	Ramey	Zürich

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
1	260	ONDR	44 NS	0642 E		508 D	14			
	234	OWIN	44 NS	0820		400 D		3		
	213	OWIN	44 NS	0820		400 D		2		
	245	SGMR	44 NS	0914 E	1833	906 D	37.4			
	410	SGMR	44 NS	0914 E	1207.3	906 D	20.7			
	127	TORN	44 NS	1000 E	1030	260 D				
	267	WCPO	44 NS	2100	0207	360	11			
	18	MCMA	6 S	1425	1427	2			1	
	228	HARS	47 GB	1555.5	1557.5	22	750	150		
	9400	HUAN	8	1637.2	1637.3	0.2	60	17.9		R
2	2000	TYKW	5 S	0318	0324	25	1.7	0.8		CR
	3750	TYKW	5 S	0320	0328	20	2	1		CL
	9400	TYKW	5 S	0320	0328	20	4	2		CL
	1420	SYDN	45 C	0328.8	0329	0.4				
	1420	SYDN	1 S	0330.7	0330.8	0.2				
	3750	TYKW	5 S	0420	0435	40	2	1		CL
	2000	TYKW	5 S	0420	0430	40	1.3	0.6		CR
	260	ONDR	44 NS	0640 E		508 D	47			
	213	OWIN	44 NS	0840	1130	380 D		5		
	234	OWIN	44 NS	0840	1200	380 D		5		
	245	SGMR	44 NS	0914 E	1515.5	906 D	152.8			
	410	SGMR	43 NS	1332	2000.8	648 D	15.5			
	237	TRST	41	0733.3	0733.4	1.3	45			4R
	1470	BERL	22	0754	0757.5	33	1			
	3000	BERL	22	0755	0802.5	30	3			
	221	ABST	6 S	0758.2	0759.2	1.5	30	7		
	237	TRST	42	0759.5	0800.5	5.2	110			3R
	207	IZMI	41 F	0800	0803		36			
	221	ABST	6 S	0801.2	0802	1.5	31	7		
	237	TRST	45	1402.7	1402.9	0.7	72	20		1R
	213	OWIN	45 C	1402	1402.5	1	190	20		
	303	OWIN	45 C	1402	1402.5	1	30	7		
	283	OWIN	45 C	1402	1402.5	1	40	10		
	245	SGMR	48 C	1622.2	1624.8	7.8U	573	172		
	410	SGMR	6 S	1624.2	1624.8	5.8U	56.6	17		
	237	TRST	41	1624.3	1624.8	3.5	470			1R
	8800	SGMR	2 S/F	1624.4	1627	9.4	5.3	1.6		
	2800	OTTA	45 C	1624.5	1625	3	4.2	2.2		
	2600	OTTA	29 PBI	1627.5	1627.5	6.5	1.6	0.8		
	606	SGMR	4 S/F	1624.6	1626.5	3.9	12.5	3.7		
	4995	SGMR	2 S/F	1624.7	1625.1	7.3	5.7	1.7		
	2695	SGMR	2 S/F	1624.7	1625.1	7.9	3.8	1.1		
	930	BORD	45 C	1624.7	1625	3.3	9	2		
	228	HARS	45 C	1624	1624.5	1	35	10		
	18	MCMA	6 S	1624	1628	5			2	
	15400	SGMR	1 S	1625.2	1628.3	7.7	6.2	1.9		
	7000	SAOP	27 RF	1625.8		13.4	4.3			
	1415	SGMR	1 S	1626.4	1626.5	1.3	1.2	.4		
	2695	BOUL	45 C	1626	1626.5	3	5	2		
	1420	BOUL	8 S	1626	1626.5	2	4	1		
	2800	OTTA	31 ABS	1634	1642	46	-1.2	-0.6		
	18	MCMA	6 S	1635	1641	9			2	
	245	SGMR	6 S	2203.5	2204.6	1.7	68.9	20.7		
	410	SGMR	6 S	2203.9	2204.7	1.3	4	1.2		
	606	SGMR	8 S	2204.3	2204.5	.4	22.6	2.2		
	245	SGMR	6 S	2247.1	2247.7	1.7	99.5	29.9		
	410	SGMR	6 S	2247.4	2247.7	.7	10.3	3.1		
	606	SGMR	8 S	2247.6	2247.7	.6	20.2	2		
3	260	ONDR	42 SER	0745.3		122.5	33	1.4		
	3000	BERL	46	0809	0821.5	14	180			
	1470	BERL	46	0817.5	0821.8	7.5	4.2	1		
	809	ONDR	3 S	0819.4	0821.5	4	16	5		
	930	BORD	45 C	0819.6	0821.6	3.6	10	2		
	315	OWIN	45 C	0907	0907.5	1	30	7		
	303	OWIN	45 C	0907	0907.5	1	25	5		
	283	OWIN	45 C	0907	0907.5	1	25	7		
	234	OWIN	45 C	0907	0907.5	1	10	4		
	213	OWIN	45 C	0907	0907.5	1	10	3		
	213	OWIN	45 C	0917	0917.5	1	10	2		
	283	OWIN	45 C	0917	0917.5	1	20	3		
	234	OWIN	45 C	0917	0917.5	1	15	5		
	234	OWIN	45 C	0947	0947.5	1	15	4		
	213	OWIN	45 C	0947	0947.5	1	40	10		
	234	OWIN	45 C	1012	1012.5	2	10	2		
	213	OWIN	45 C	1012	1012.5	2	25	5		
	260	ONDR	7 C	1115	1115.8	2.5	4	0.7		
	315	OWIN	45 C	1117	1117.5	2	100	5		
	283	OWIN	45 C	1117	1117.5	1	12	3		
	213	OWIN	45 C	1117	1117.5	2	90	10		
	260	ONDR	9 S	1147.8	1147.8	0.2	3			
	260	ONDR	45 C	1223.2	1224.2	1.5	10	4.6		
	228	HARS	45 C	1223.5	1224	1	23	6		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	213	DWIN	45 C	1223	1223.5	2	55	20		
	234	DWIN	45 C	1223	1223.5	2	25	8		
	260	ONDR	45 C	1458.2	1502	4.5	35	3.3		
	213	DWIN	45 C	1458	1501	4	90	20		
	234	DWIN	45 C	1458	1501	4	60	10		
	283	DWIN	45 C	1459	1501	3	65	15		
	315	DWIN	45 C	1459	1501	3	200	10		
	300	DWIN	45 C	1459	1501	3	180	20		
	237	TRST	41	1501.2	1501.5	0.9	65			4R
	930	BORO	45 C	1501.3	1501.9	0.7	12	2		
	228	HARS	45 C	1501.5	1502	1	23	7		
	2800	OTTA	8 S	1501.7	1502	0.3	1.2	0.6		
	2800	OTTA	20 GRF	1628	1630	92	0.8	0.4		
	100	HIRA	45 C	2126	2126.7	2	870	250		WL
	200	HIRA	45 C	2126	2126.4	1	130	40		WL
	2800	OTTA	8 S	2126.3	2126.3	0.1E	0.6			
	18	MCMA	6 S	2127	2128	2			1	
4	2000	TYKW	5 S	0447	0449.1	5	4	1		CR
	720	SYDN	40 F	0448 U	0451 U	3 U				
	1420	SYDN	40 F	0448 U	0451 U	3 U				
	1000	TYKW	45 C	0448	0449.5	3	3	2		SR
	200	HIRA	27 RF	0453.5	0500 U	13	3	1		J
	100	HIRA	27 RF	0459	0510.5	25.5	7	4		J
	3100	CRIM	45 C	1208	1211	17	3	2		
	3100	CRIM	45 C	1208	1217		3.5			
	3100	CRIM	1 S	1240	1241	5	5	2		
	245	SGMR	6 S	1319.1	1330.3	30.1	31.7	6.3		
	260	ONDR	42 SER	1321	1328.7	28	14	4		
	260	ONDR	41 F	1504	1506.7	9.5	8	2		
	606	SGMR	4 S/F	1506.2	1506.8	1.4	80.5	24.2		
	245	SGMR	6 S	1506.2	1506.7	.8	16.4	3.3		
	410	SGMR	6 S	1506.3	1507.8	1.7	17.5	3.5		
	2800	OTTA	8 S	1506.5	1506.7	0.5	1.2	0.6		
	536	ONDR	4 S/F	1506.5	1507.2	1.2	45	17		
	2800	OTTA	8 S	1558.5	1558.6	0.2	4.5			
	245	SGMR	43 NS	1704.4	1822.7	160.6	30.8			
	410	SGMR	43 NS	1707.6	1908.6	140.9	11.5			
	228	HARS	42 SER	1711	1755	120				
	606	SGMR	43 NS	1720.1	1831.7	137.4	6			
	2800	OTTA	27 RF	2130		120	1.2	0.6		
	2800	OTTA	24 R	2130	2142	12	1.2	1		
	2800	OTTA	24P R	2142		78	1.2			
	2695	PENT	26 FAL	2300	2330	30	-1.2	-0.6		
5	260	ONDR	44 NS	0655		495 D	28			
	245	SGMR	44 NS	0916 E	1316.7	644 D	35.6			
	228	HARS	43 NS	1110	1315	245	10	5		
	3100	CRIM	24 R	0735	0812		4			
6	2000	TYKW	45 C	0330.5	0332.1	2.5	6	1		CR
	260	ONDR	44 NS	0738		451 D	11			
	221	ABST	7 C	0926.8	0927	0.5	30			
7	1420	BERL	1	1016.9	1017.2	1.1	1.2			
	18	MCMA	42 SER	1905	1906	5			1	
	8800	PALE	4 S/F	1943.6	1947.5	5.7	31	120		
8	2800	OTTA	22F GRF	1828	1847	30	0.6	0.3		
	18	MCMA	6 S	2128	2131	3			1	
9	260	ONDR	4 S/F	1036	1036.6	1.6	12	4		
11	720	SYDN	45 C	0326	0326.5	0.8				
	720	SYDN	4 S/F	0526	0526.3	0.4				
	3100	CRIM	24 R	0720	0915		3			
	260	ONDR	43 NS	0735		445 D	37			
	221	ABST	43 NS	0810	0823.8	20	13			
	237	TRST	42	0738.3	0739.7	3.4	96			J
	221	ABST	7 C	0740	0740.2	0.8	37			
	221	ABST	7 C	0741.5	0741.8	0.5	47			
	18	MCMA	6 S	1717	1720	3			2	
	207	WORO	44 NS	2100	2240	360	10			
12	3750	TYKW	5 S	0348	0349.7	5	4	1		BL2640S2F
	2000	TYKW	5 S	0348	0349.7	7	0.6	0.2		CR
	228	HARS	45 C	0453	0457.5	5.5	25	5		
	245	SGMR	44 NS	0921 E	1339.5	895 D	32.2			
	260	ONDR	42 SER	1051.4	1118.4	42	33	0.8		
	245	SGMR	6 S	1117.7	1118.1	.7	99.9	20		
	410	SGMR	6 S	1117.8	1117.9	.4	20	4		
	606	SGMR	2 S/F	1117.8	1117.9	.4	5.5	1.7		
	409	TRST	45	1117.8	1117.9	0.5	43	4		
	237	TRST	41	1117.8	1118.1	0.5	390			4R
	113	POTS	45 C	1117.9	1118	0.1	600	200		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
	234	POTS	45 C	1118	1118.1	0.1	120	15		
	260	ONDR	42 SER	1328.7	1328.7	12	7	1.6		
	237	TRST	41	1339.6	1339.7	0.8	130			2R
	2800	OTTA	240 R	1425	1540	75	2.2	1.1		
	2800	OTTA	24PFR	1540		380 D	2.2			
13	207	WORO	44 NS	0018	0105	127	12			
	100	HIRA	45 C	0736.2	0738.6	3	1600	900		WR
	245	SGMR	44 NS	0921 E	1520.3	895 D	22.8			
	260	ONDR	42 SER	0938.5	1040.5	101	10	0.9		
	930	BORO	45 C	1027.3	1027.6	1	10	2		
	930	BORO	45 C	1032.8	1032.8	0.1	9	1		
	113	POTS	45 C	1040.7	1040.8	0.1	350	70		
	228	HARS	1 S	1041.8	1041	0.5	33	14		
	221	ABST	7 C	1040.8	1041	0.5	22			
	2800	OTTA	21A GRF	1125	1130	21	2.6	0.8		
	2800	OTTA	8 S	1127.2	1127.2	0.1	1.2			
	260	ONDR	42 SER	1320	1320.6	70	7			
	2695	SGMR	4 S/F	1600.7	1612.9	14.8	28.8	8.6		
	2695	SGMR	29 PBI	1615.5	1615.5	45.5	5	2		
	8800	SGMR	4 S/F	1605.7	1612.9	9.3	14.8	4.4		
	8800	SGMR	29 PBI	1615	1615	46	13.3	5.3		
	4995	SGMR	4 S/F	1606.3	1613	8.7	51.2	15.4		
	4995	SGMR	29 PBI	1615	1615	46	10.1	4		
	2695	BOUL	3 A	1607.5	1613.5	33	18	5		
	1420	BOUL	3 A	1607.5	1613.5	20	14	4		
	9240	ARCE	20	1607.8	1613.8	70				
	2800	OTTA	4 S/F	1607	1612.8	10	32.6	13.2		
	2800	OTTA	29 PBI	1617	1617	73	6.2	3.1		
	7000	SAOP	3 S	1608.8	1613.4	7	38.1	19.8		
	7000	SAOP	29 PBI	1615.8		62				
	1415	ATHN	4 S/F	1609.6	1614.1	8.1	38.1	11.4		
	2695	ATHN	4 S/F	1610.4	1613.2	8.4	26.3	7.9		
	4995	ATHN	4 S/F	1610.4	1613.2	8.4	43.2	13		
	9400	HUAN	20	1610.6	1613.1	45.1	19.5	5.5		
	1415	SGMR	4 S/F	1610.8	1613.8	4.2	28.6	8.6		
	1415	SGMR	29 PBI	1615	1615	8.8	2.5	1		
	4995	BOUL	3 A	1610	1613	23	307	81		
	1420	ARCE	40	1611.5	1614.4	24				
	8800	ATHN	4 S/F	1611.8	1613.2	6	30.7	9.2		
	2800	OTTA	32 ABS	1630	1805	100	2.4	1.2		
	2695	SGMR	22 GRF	2053	2056.4	24.2	17.8	10.7		
	4995	SGMR	20 GRF	2055.4	2056.6	28.2	4.6	2.8		
	2800	OTTA	1A S	2055.8	2056.3	1.7	2.6	1.4		
	2800	OTTA	8 S	2056.2	2056.3	0.1E	6.2			
	2800	OTTA	29 PBI	2057.5	2057.5	13	1.2	0.6		
14	260	ONDR	44 NS	0630 E		520 D	20			
	410	SGMR	44 NS	0922 E	1559.8	893 D	7.9			
	245	SGMR	44 NS	0922 E	1559.8	893 D	118.7			
	207	WORO	44 NS	2100	2125	53	9			
	9240	ARCE	22	1033	1108.5	58				
	3100	GRIM	3 S	1047	1005	48	7	2		
	606	SGMR	4 S/F	1047.5	1051.2	5.1	40	12		
	1415	SGMR	2 S/F	1047.5	1050	6	4.4	1.3		
	4995	SGMR	4 S/F	1047.7	1049.9	4.8	11.6	3.5		
	2695	SGMR	4 S/F	1047.7	1049.8	4.8	11	3.3		
	8800	SGMR	22 GRF	1048.3	1057.8	45.4	7.5	4.5		
	2695	ATHN	4 S/F	1048.3	1050	4	11.9	3.6		
	4995	ATHN	2 S/F	1048.3	1050	4.2	8.3	2.5		
	8800	ATHN	2 S/F	1048.5	1050.2	3.8	4.2	1.4		
	1420	ARCE	22	1048.5	1050	41				
	3000	BERL	45	1048.5	1049.8	5	10	3.5		
	1470	BERL	45	1048.5	1049.8	8	5.1	1.7		
	1415	ATHN	2 S/F	1048.9	1050.1	3.6	4.1	1.2		
	809	ONDR	1 S	1050.4	1050.8	1.5	10	1		
	536	ONDR	3 S	1050.6	1051.3	1.5	46	3		
	930	BORO	45 C	1051	1051	0.8	10	2		
	2695	SGMR	29 PBI	1052.5	1052.5	44.8	3	1.8		
	4995	SGMR	29 PBI	1052.5	1052.5	89.6	3.2	1.9		
	221	ABST	7 C	1057.5	1057.8	0.8	27			
	2800	OTTA	26 FAL	1235	1305	30	-1.6	-0.9		
	9240	ARCE	1	1542.5	1543.5	2.6				
	237	TRST	45	1733.1	1733.2	0.2	100	26		2R
	8800	SGMR	1 S	1837.7	1841.8	8	5.8	2.3		
	2800	OTTA	20 GRF	1837	1841	55	4	1.4		
	2695	SGMR	20 GRF	1838.1	1841.3	12.7	3.8	1.9		
	4995	SGMR	1 S	1838.4	1840.8	7.2	4.6	1.8		
	2800	OTTA	20 GRF	2020	2100	165	3	1.8		
15	2695	PENT	20 GRF	0020	0102	90 D	4.4			
	3750	TYKW	5 S	0058	0102.5	30	3	1		OL
	2200	TYKW	5 S	0058	0102	12	2	0.6		OR
	9400	TYKW	5 S	0101	0101.7	3	3	1		OL
	100	HIRA	45 C	0452	0452.4	1	1700	600		WR

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	100	HIRA	45 C	0458.4	0458.4	2	420	80		MR
	260	ONDR	44 NS	0814 E		206	12			
	930	BORO	1 S	1056.5	1056.6	0.1	10	1		
	2800	OTTA	20 GRF	1110	1125	60	1.6	0.8		
	2800	OTTA	240 R	2105	2122	15	1	0.5		
	2800	OTTA	24P R	2122		170	1			
16	2695	PENT	240 R	0012	0120	68	1	0.5		
	2695	PENT	24P R	0120		30 D	1			
	9240	ARCE	2	1619.8	1620	1.4				
	2695	PENT	20 GRF	2325	2345	60	1.6	0.8		
17	9240	ARCE	40	1024.8	1030.7	12.8				
	245	SGMR	43 NS	1051	1516.4	802 D	11.6			
	410	SGMR	6 S	1416.5	1418.5	2.5	11.3	3.4		
	245	SGMR	6 S	1417.4	1417.9	1.9	6.2	1.8		
	606	SGMR	1 S	1418.3	1418.7	.5	1.4	.4		
	245	SGMR	6 S	1724.8	1727.5	3.2	13	2.6		
	606	SGMR	2 S/F	1725.4	1729.1	3.3	6.8	2		
	410	SGMR	6 S	1726.3	1727.5	1.8	7	1.4		
	18	MCMA	6 S	2030	2032	2			1	
18	2695	PENT	240 R	0005	0020	15	1.2	0.6		
	2695	PENT	24P R	0020		90 D	1.2			
	4995	BOUL	1 F	1743	1744	2	10	3.		
20	3750	TYKW	5 S	0314	0314.5	2	8	3		GR
	3750	TYKW	29 PBI	0316		30	3	1		
	2000	TYKW	5 S	0314	0314.6	2	4	2		GL
	2000	TYKW	29 PBI	0316		25	1	0.5		
	2695	BOUL	1 F	1450	1451.5	2	3	1		
	234	OWIN	45 C	1455	1456	2	10	3		
	213	OWIN	45 C	1455	1456	2	10	3		
	315	OWIN	45 C	1456	1456.5	1	10	2		
	300	OWIN	45 C	1456	1456.5	1	10	3		
	18	MCMA	6 S	1822	1824	3			1	
21	260	ONDR	4 S/F	0752	0756.5	8	21	0.9		
	260	ONDR	43 NS	0930		342 D	9			
	245	SGMR	43 NS	1013.6	1740.1	644.5	23.5			
	9240	ARCE	2	1147.8	1148.3	1.6				
	2800	OTTA	20 GRF	1245	1320	120	1.2	0.6		
	1415	SGMR	4 S/F	1608.9	1609.1	1.2	17.3	5.2		
	2695	SGMR	2 S/F	1609	1610	1.2	7.6	2.3		
23	2695	BOUL	28 PRE	0112	0116	5.5	5	2		
	221	ABST	7 C	1055	1055.2	0.5	19			
	260	ONDR	43 NS	1250		132 D	5			
	2800	OTTA	20 GRF	2256	2258	12	1.2	0.5		
24	3100	CRIM	20 RF	0613	0659	89	2	1		
	260	ONDR	44 NS	0636 E		516 D	7			
	245	SGMR	43 NS	1254.8	2046.8	673.20	51.5			
	245	SGMR	6 S	1141.7	1149.2	12	46.9	9.4		
	2695	SGMR	4 S/F	1429.4	1436.4	16.3	48.6	14.6		
	2695	SGMR	30 PBI	1445.7	1445.7	26.9	3.6	1.4		
	410	SGMR	6 S	1431.5	1437.3	7.8	9	2.7		
	606	SGMR	4 S/F	1434.9	1437	11.6	38.9	11.7		
	606	SGMR	29 PBI	1446.5	1446.5	40.4	3.2	1.3		
	1415	SGMR	4 S/F	1435.7	1439.1	9.4	32.9	9.9		
	1415	SGMR	29 PBI	1445.1	1445.1	14.5	2.5	1		
	3000	BERL	22	1435.7	1436.5	3.3	4.2	1.5		
	1470	BERL	4	1435.7	1439	14	32	3.3		
	245	SGMR	6 S	1435.8	1437.7	6.6	10.9	3.3		
	608	ONDR	2 S/F	1436.4	1437	1.6	15	4		
	536	ONDR	45 C	1436.5	1437.3	3.7	18	5		
	260	ONDR	45 C	1436	1437.5	10	8	3		
	2800	OTTA	40 F	1436	1436.4	2.5	5.4			
	2800	OTTA	22F GRF	1436	1441	45	2.2	1.1		
	1415	ATHN	4 S/F	1438.8	1439	3.7	24	7.2		
	2695	SGMR	4 S/F	1505.1	1505.3	.4	29.3	8.8		
	1415	SGMR	41 F	1522.5	1531.7	9.4	35	7		
	2695	SGMR	4 S/F	1525.4	1525.9	1.3	52.9	15.9		
	245	SGMR	6 S	1637.5	1645.8	10	58.2	17.5		
	245	SGMR	41 F	2153	2154.8	17.3	57.8	11.6		
	1415	SGMR	1 S	2153.2	2153.3	.2	2.2	.7		
	410	SGMR	41 F	2153.2	2154.8	6.5	25	5		
	606	SGMR	41 F	2153.4	2153.5	6.3	26.4	5.3		
25	100	HIRA	45 C	0810.5	0810.6	0.5	370	200		MR
	100	HIRA	45 C	0814	0814.4	1	280	130		ML
	100	HIRA	45 C	0909.7	0910	1	1600	1000		ML
	410	SGMR	6 S	1305.8	1307.1	2.1	55.6	11.1		
	245	SGMR	6 S	1307	1307.2	.5	.8	.3		
	9400	HUAN	3	2130.3	2131	3.5	22.1	6.5		G

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	9400	HUAN	1	2141	2141.4	1	14	6.8		C
	2695	BOUL	45 C	2321.5	2336.5	18.5	10	11		
	2695	PENT	250A	2325	2342	17	2.4			
	1420	BOUL	2 S	2332.5	2335	6.5	3	1		
	1420	SYDN	22 SRF	2333	2335.6	7				
	2000	TYKW	5 S	2333	2336.2	6	5	1.5		DR
	1000	TYKW	5 S	2333	2336	6	3	1		DR
	2695	PENT	2 S/F	2333	2336.2	9	3.8	1.3		
	3750	TYKW	5 S	2334	2337	8	2	1		DL
	2695	PENT	24P R	2342		130	2.4			
26	260	ONDR	44 NS	0632 E		526 D	25			
	245	SGMR	43 NS	1231.8	2215.3	694.2D	59			
	207	VORO	44 NS	2130	2209	135	10			
	2800	OTTA	22F SRF	2015	2140	300	3.2	1.6		
27	260	ONDR	44 NS	0620 E		533 D	15			
	245	SGMR	44 NS	0934 E	2117.1	971 D	213.5			
	410	SGMR	43 NS	1802	1822.4	155.1	151.8			
	606	SGMR	43 NS	1810.7	1911.5	132	9.2			
	207	VORO	44 NS	2100	0150	360	20			
	930	BORD	1 S	1637.8	1637.8	0.1	35	1		
	18	MCMA	6 S	1657	1659	2			1	
	2800	OTTA	24 R	1815	1850	35	1.4	0.7		
	2800	OTTA	27A RF	1815		285	1.4	1.1		
	2800	OTTA	1 S	1823	1823.2	1	1	0.5		
	2800	OTTA	24P R	1850		170	1.4			
	2800	OTTA	26 FAL	2140	2300	80	-1.4	-0.7		
28	260	ONDR	44 NS	0652 E		506 D	30			
	221	ABST	44 NS	0700	0713.2	205	9			
	127	TORN	44 NS	0840 E	1215	340 D				
	410	SGMR	44 NS	0935 E	1820.3	869 D	24			
	245	SGMR	44 NS	0935 E	2310.3	869 D	188.1			
	207	VORO	44 NS	2100	0218	360	17			
	127	TORN	45 C	1120.5	1122.6	3	120 U			
	127	TORN	45 C	1210	1213.2	15	100 U			
	2800	OTTA	20 SRF	1650	1700	35	0.6	0.3		
	1415	SGMR	22 S/F	1901.2	1907.2	12.5	7	4.2		
	410	SGMR	6 S	1901.6	1907.6	7.2	16	3.2		
	606	SGMR	22 S/F	1902.3	1907.2	21.3	21.6	13		
	2695	SGMR	22 S/F	1906.7	1912.1	15.1	2.5	1.5		
	1420	BOUL	8 S	1906	1906.5	2.5	3	1		
	2800	OTTA	240 R	1955	2000	5	1.2	0.6		
	2695	SGMR	2 S/F	1958.3	2005.8	8.2	2.1	.6		
	2800	OTTA	24P R	2000		360 D	1.2			
	2800	OTTA	1 S	2140.5	2141.1	4	1	0.5		
29	260	ONDR	44 NS	0630 E		543 D	21			
	245	SGMR	44 NS	0936 E	2136.3	867 D	48			
	410	SGMR	44 NS	0936 E	1316.2	867 D	14			
	245	SGMR	6 S	1218.4	1220.1	3.7	29.5	5.9		
	2800	OTTA	41 SER	1218.5	1219	3	1.6			
	2695	SGMR	2 S/F	1219.5	1221.2	3.2	2.2	.7		
	2800	OTTA	1 S	1218.5	1219	1.8	1.6	0.8		
	4995	SGMR	2 S/F	1218.5	1219.2	1.5	1.9	.6		
	113	POTS	45 C	1218.5	1220	6	550	70		
	1415	SGMR	2 S/F	1218.7	1219.5	5.9	5.1	1.5		
	1415	ATHN	1 S	1213.7	1213.8	1.6	6.6	2		
	2695	ATHN	1 S	1218.7	1219.6	1.3	3.5	1.1		
	606	SGMR	2 S/F	1218.7	1220.6	2.9	6.2	1.9		
	410	SGMR	6 S	1219.8	1223.1	5.2	2	.6		
	4995	ATHN	1 S	1218.8	1219.4	1.4	3.2	1		
	8800	ATHN	1 S	1218.8	1219.5	1.4	4.8	1.4		
	237	TRST	42	1218.8	1220.1	2.8	70			12R
	9500	BERL	20	1219	1219.5	3	4.2	1.7		
	2800	OTTA	1 S	1220	1220.5	1	1.2	0.6		
	930	BORD	45 C	1222.1	1222.3	0.3	9	2		
	930	BORD	45 C	1226.1	1226.3	0.1	11	2		
	9240	ARCE	3	1556.9	1557.3	1.4				
	18	MCMA	6 S	1729	1730	2			1	
	18	MCMA	41 F	1757	1802	8			1	
	18	MCMA	42 SER	1807	1808	7			1	
	18	MCMA	6 S	1824	1825	2			1	
	18	MCMA	4 F	2035	2038	7			1	
	207	VORO	44 NS	2100	2203	125	11			
	18	MCMA	6 S	2128	2129	2			1	
	2695	PENT	240 R	2150	2320	90	1.2	0.6		
	2695	PENT	24P R	2320		140 D	1.2			
30	260	ONDR	44 NS	0635 E		522 D	12			
	245	SGMR	44 NS	0937 E	1313.4	865 D	35			
31	207	VORO	44 NS	0005	0131	175	9			
	260	ONDR	44 NS	0643 E		515 D	17			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JULY 1975

JUL 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
	221	ABST	44 NS	0909.8	0945.5	78	9			
	245	SGMR	44 NS	0938 E	1146.6	863 D	17.1			
	410	SGMR	44 NS	0938 E	2012.5	863 D	4.7			
	2800	OTTA	1 S	1100.9	1101.1	1.5	2.2	1.1		
	930	BORD	45 C	1108.6	1109.2	0.7	11	2		
	2800	OTTA	1 S	1132	1133	2.5	0.8	0.5		
	2800	OTTA	26F FAL	1200	1300	60	-3.4	-1.9		
	8800	SGMR	23 SRF	1256.5	1311.4	52	35.1	21.1		
	8800	SGMR	46 C	1303.6	1305	2.5	124.2	68.7		
	8800	SGMR	46 C		1305.9		343.4			
	18	MCMA	6 S	1309	1310	2			1	
	8800	SGMR	4 S/F	1329.7	1329.8	.8	61	18.3		
	2800	OTTA	22F SRF	1420	1810	305	3.4	1.7		
	2800	OTTA	240 R	1955	2042	47	2.4	1.2		
	9400	HUAN	20	2011.2	2048.4	52.7	14.6	7.6		
	2800	OTTA	24P R	2042		83	2.4			
	2695	PENT	22F SRF	2205	2305	165	2.6	1.6		

Reports received from the following observatories:

ABST = Abastumani
ARCE = Arcetri
BERL = Berlin-Adlershof
BORD = Bordeaux
BOUL = Boulder
CRIM = Simferopol
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Moscow Izmiran
KIEV = Kiev
KISV = Kislovodsk
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SYDN = Sydney
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
UPIC = Upice
VORO = Voroshilov (Ussurisk)

SGD 377 Part II (Comprehensive)

JUNE 1975 DATA

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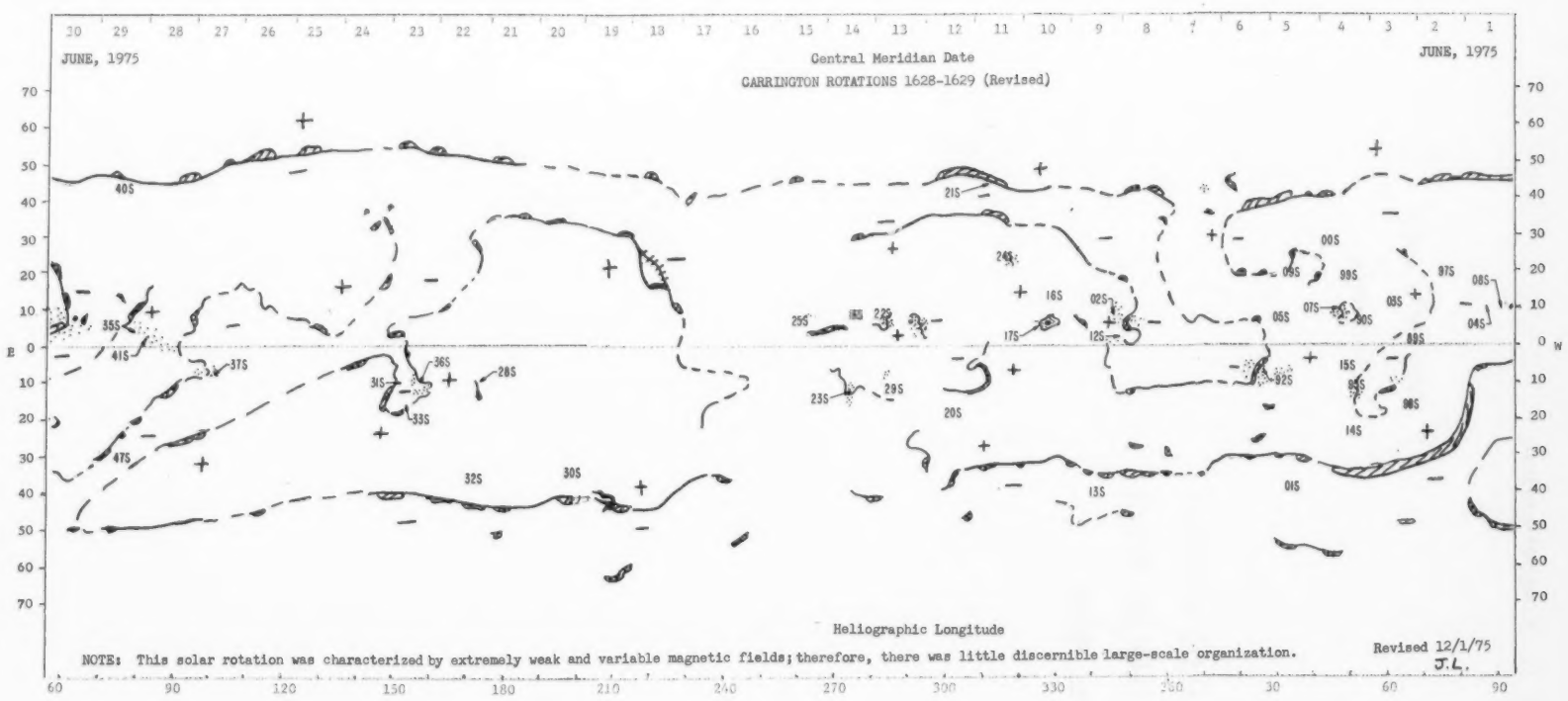
ABBREVIATED CALENDAR RECORD

Hα SYNOPTIC CHART

JUNE 1975



NOTE: This solar rotation was characterized by extremely weak and variable magnetic fields; therefore, there was little discernible large-scale organization.

Revised 12/1/75
J.L.

ABBREVIATED CALENDAR RECORD

JUNE 1975

June 1, 1975 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 24 D	Kp	2o 1+ 1o 2o 4o 4+ 6- 5-
	sc	▲1729(9)
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 7 10cm flux: 69 Flare: 0/20.7 Ca: 2.1 Ip: 0 Ig: 1
Solar Regions		(13708) N09 (13704) N10
Sunspots		

June 2, 1975 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	11
	Dkm	
SID		
X-Rays		
Ap 28D	Kp	5- 5o 5- 4o 3o 3o 3o 4o
	sc	
Aurora	USSR	
	W.E.	ϕ = 59° 0100, 0200 (glow, possibly HB) central Scotland
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- SW-
Indices		Rz: 11 10cm flux: 71 Flare: 0/23.9 Ca: 3.3 Ip: 0 Ig: 5
Solar Regions		13697 N19
Sunspots		

June 3, 1975 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 12	Kp	3o 2o 3- 3- 3- 2+ 3- 3o
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 8 10cm flux: 69 Flare: 5/23.4 Ca: 2.8 Ip: 0 Ig: 3
Solar Regions		(13689) N01 13698 S17 13703 N12
Sunspots		

June 4, 1975 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 11	Kp	3o 3o 3- 2- 2+ 2+ 2+ 3-
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 7 10cm flux: 68 Flare: 3/22.1 Ca: 3.1 Ip: 0 Ig: 5
Solar Regions		13690 N06 (13695) S12 (13714) S23 (13699) N18 (13715) S06 13707 N09 (13700) N28
Sunspots		19576 N09 (Bf)2

June 5, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID: I

X-Rays

Ap 12 — Kp: 3+ | 2+ | 2+ | 3- | 2o | 2o | 3o | 4-

Aurora: USSR; W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW-; SW-

Indices — Rz: 7; 10cm flux: 67; Flare: 5/24.0; Ca: 2.3; Ip: 0; Ia: 3

Solar Regions: (13701) S39; 13709 N19; 13705 N07

Sunspots

June 6, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID

X-Rays

Ap 11 — Kp: 3o | 3- | 3- | 3o | 2+ | 2o | 2+ | 2+

Aurora: USSR; W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data

Indices — Rz: 7; 10cm flux: 66; Flare: 11/23.5; Ca: 3.1; Ip: 0; Ia: 1

Solar Regions: 13692 S07

Sunspots: (19575) S07 (αp)2 CMP June 5

June 7, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID: I

X-Rays

Ap 6 — Kp: 2- | 1+ | 2o | 1+ | 1- | 1o | 2o | 3o

Aurora: USSR; W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data

Indices — Rz: 0; 10cm flux: 66; Flare: 0/23.4; Ca: 2.0; Ip: 0; Ia: 0

Solar Regions

Sunspots

June 8, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID

X-Rays

Ap 400 — Kp: 1- | 1- | 1o | 1o | 2- | 1o | 0+ | 1o

Aurora: USSR; W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE-; SE-; W. Limb 7 days later: NW-; SW-

Indices — Rz: 0; 10cm flux: 66; Flare: 0/24.0; Ca: 1.8; Ip: 0; Ia: 0

Solar Regions

Sunspots

June 9, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm: 1; m; Dkm: 1

SID

X-Rays

Ap 50 — Kp: 2- | 3- | 1o | 1+ | 1o | 1o | 1- | 1o

sc

Aurora: USSR; W.E.

Cosmic Rays

Green Corona Indices: E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data
Rz: 0; 10cm flux: 66; Flare: 0/24.0; Ca: 1.7; Ip: 0; Ia: 1

Solar Regions: (13712) N02; 13702 N09; (13713) S40

Sunspots

June 10, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID

X-Rays

Ap 40 — Kp: 1- | 1- | 1- | 1- | 1o | 1+ | 1o | 1+

sc

Aurora: USSR; W.E.

Cosmic Rays

Green Corona Indices: E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW-; SW-
Rz: 0; 10cm flux: 67; Flare: 0/23.3; Ca: 0.8; Ip: 0; Ia: 0

Solar Regions: (13716) N14; 13717 N05; (19577) N06 Bf

Sunspots

June 11, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID

X-Rays

Ap 14 — Kp: 2o | 2- | 3+ | 4+ | 3o | 2+ | 3+ | 2+

sc

Aurora: USSR; W.E.

Cosmic Rays

Green Corona Indices: E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data
Rz: 9; 10cm flux: 66; Flare: 1/23.6; Ca: no data; Ip: 0; Ia: 2

Solar Regions: (13724) N24; (13721) N44

Sunspots

June 12, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm; dm; m; Dkm

SID

X-Rays

Ap 27 — Kp: 3o | 3+ | 4- | 4+ | 5o | 4o | 4- | 4+

sc

Aurora: USSR; W.E.

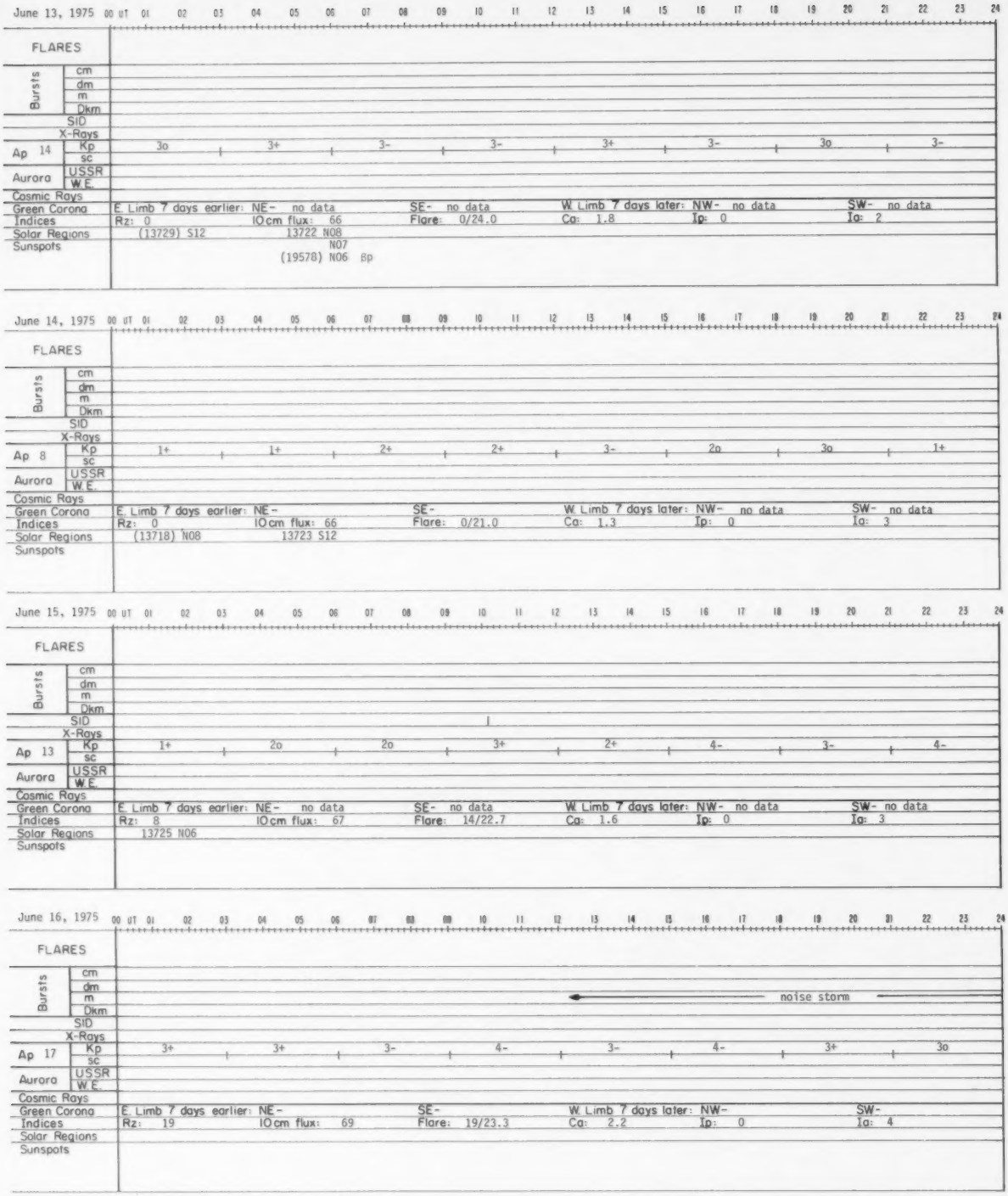
Cosmic Rays

Green Corona Indices: E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW-; SW-
Rz: 0; 10cm flux: 66; Flare: 0/22.7; Ca: 0.9; Ip: 0; Ia: 3

Solar Regions: 13720 S18

Sunspots

28
Jun 75


June 13, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 14
Kp
sc
3o 3+ 3- 3- 3+ 3- 3o 3-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 0 10cm flux: 66 Flare: 0/24.0 Ca: 1.8 Ip: 0 Ia: 2
Solar Regions
(13729) S12 13722 N08
Sunspots
N07
(19578) N06 βp
June 14, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 8
Kp
sc
1+ 1+ 2+ 2+ 3- 2o 3o 1+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 0 10cm flux: 66 Flare: 0/21.0 Ca: 1.3 Ip: 0 Ia: 3
Solar Regions
(13718) N08 13723 S12
Sunspots
June 15, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 13
Kp
sc
1+ 2o 2o 3+ 2+ 4- 3- 4-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 8 10cm flux: 67 Flare: 14/22.7 Ca: 1.6 Ip: 0 Ia: 3
Solar Regions
13725 N06
Sunspots
June 16, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 17
Kp
sc
3+ 3+ 3- 4- 3- 4- 3+ 3o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- SW-
Indices
Rz: 19 10cm flux: 69 Flare: 19/23.3 Ca: 2.2 Ip: 0 Ia: 4
Solar Regions
Sunspots

June 17, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm, dm, m, Dkm — m: noise storm

SID

X-Rays

Ap 12 — Kp: 2- 1o 2o 4- 3- 3o 3+ 3o — sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data

Indices — Rz: 17; 10cm flux: 68; Flare: 0/24.0; Cg: 1.6; Ip: 0; Ia: 2

Solar Regions

Sunspots

June 18, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm, dm, m, Dkm

SID

X-Rays

Ap 12 — Kp: 3o 3+ 3- 2- 2+ 3o 3- 2- — sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data

Indices — Rz: 12; 10cm flux: 68; Flare: 0/23.9; Cg: 1.0; Ip: 0; Ia: 2

Solar Regions

Sunspots

June 19, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES — 1b/29; 2f/22

Bursts: cm, dm, m, Dkm

SID

X-Rays

Ap 12 — Kp: 3o 2o 3- 2o 3- 3o 3- 3- — sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona — E. Limb 7 days earlier: NE-; SE-; W. Limb 7 days later: NW- no data; SW- no data

Indices — Rz: 16; 10cm flux: 69; Flare: 54/18.1; Cg: 0.4; Ip: 0; Ia: 2

Solar Regions

Sunspots

June 20, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm, dm, m, Dkm

SID

X-Rays

Ap 6 — Kp: 2- 2- 1+ 1o 1+ 1o 3- 2- — sc

Aurora: USSR, W.E.

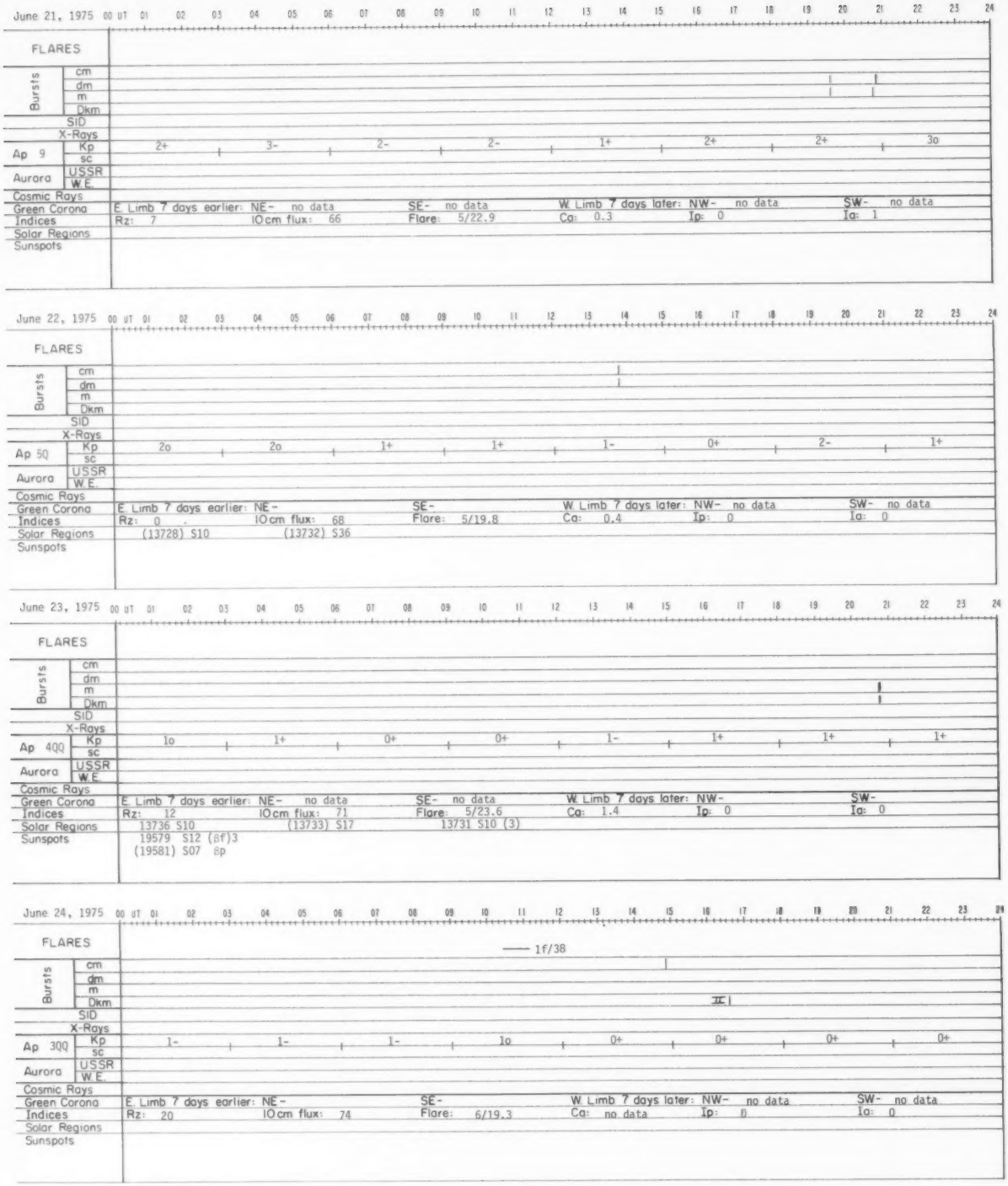
Cosmic Rays

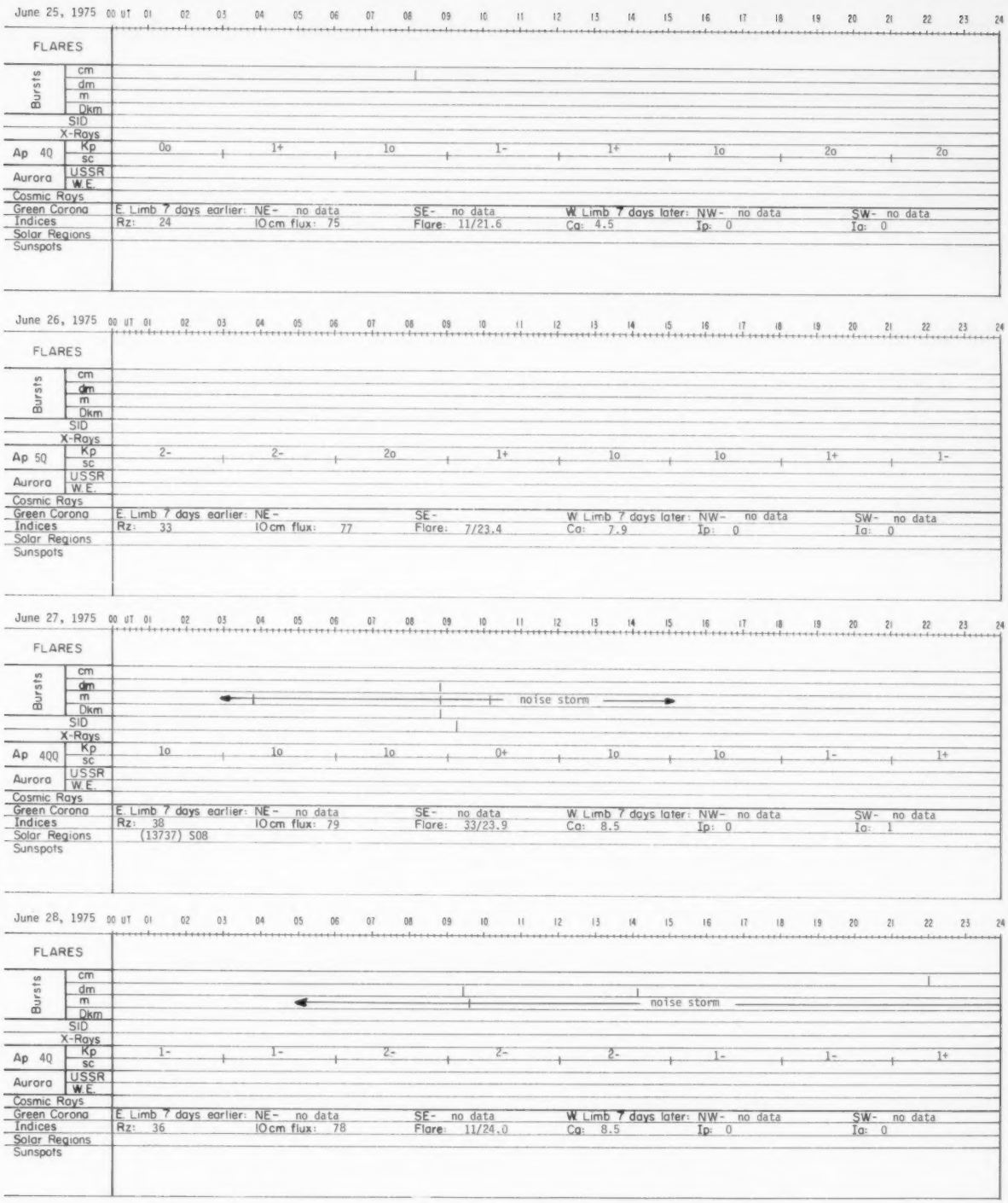
Green Corona — E. Limb 7 days earlier: NE- no data; SE- no data; W. Limb 7 days later: NW- no data; SW- no data

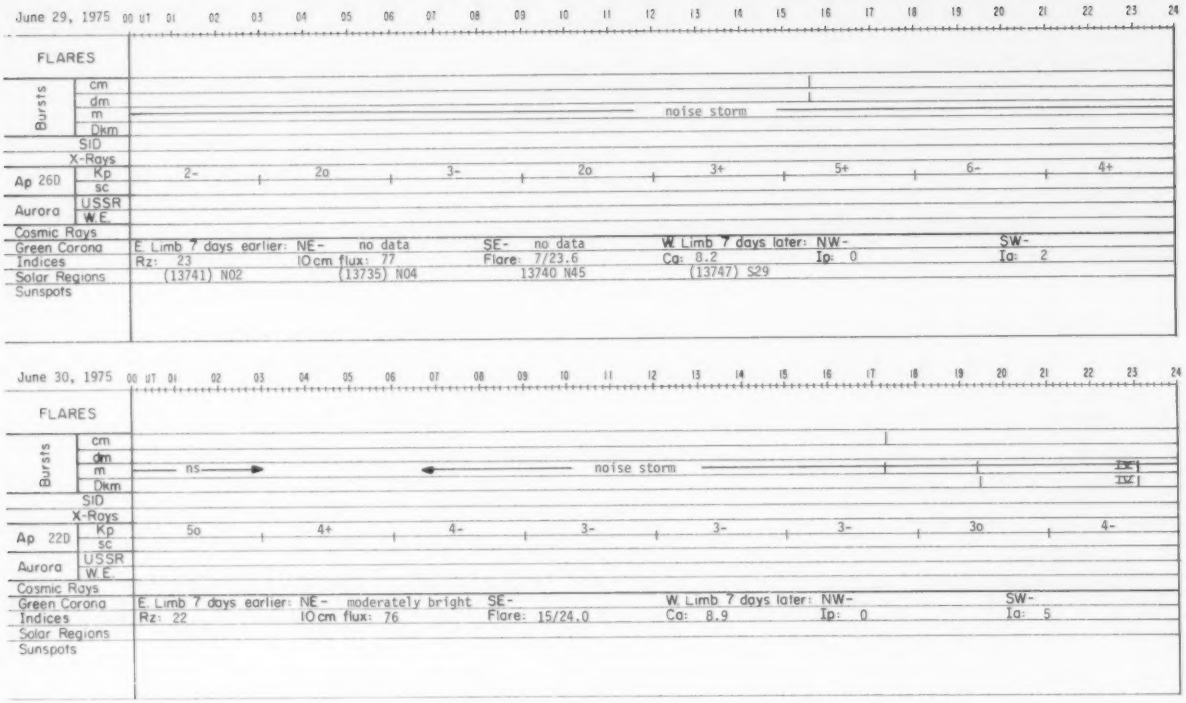
Indices — Rz: 0; 10cm flux: 70; Flare: 4/24.0; Cg: 0.6; Ip: 0; Ia: 0

Solar Regions: (13730) S35

Sunspots


June 21, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts cm dm m Dkm
SID
X-Rays
Ap 9 Kp 2+ 3- 2- 2- 1+ 2+ 2+ 3o
sc
Aurora USSR W.E.
Cosmic Rays
Green Corona Indices E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Rz: 7 10cm flux: 66 Flare: 5/22.9 Ca: 0.3 Ip: 0 Ia: 1
Solar Regions
Sunspots
June 22, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts cm dm m Dkm
SID
X-Rays
Ap 50 Kp 2o 2o 1+ 1+ 1- 0+ 2- 1+
sc
Aurora USSR W.E.
Cosmic Rays
Green Corona Indices E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data
Rz: 0 10cm flux: 68 Flare: 5/19.8 Ca: 0.4 Ip: 0 Ia: 0
Solar Regions (13728) S10 (13732) S36
Sunspots
June 23, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts cm dm m Dkm
SID
X-Rays
Ap 400 Kp 1o 1+ 0+ 0+ 1- 1+ 1+ 1+
sc
Aurora USSR W.E.
Cosmic Rays
Green Corona Indices E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- SW-
Rz: 12 10cm flux: 71 Flare: 5/23.6 Ca: 1.4 Ip: 0 Ia: 0
Solar Regions 13736 S10 (13733) S17 13731 S10 (3)
Sunspots 19579 S12 (βf)3
(19581) S07 βp
June 24, 1975 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES 1f/38
Bursts cm dm m Dkm
SID
X-Rays
Ap 300 Kp 1- 1- 1- 1o 0+ 0+ 0+ 0+
sc
Aurora USSR W.E.
Cosmic Rays
Green Corona Indices E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data
Rz: 20 10cm flux: 74 Flare: 6/19.3 Ca: no data Ip: 0 Ia: 0
Solar Regions
Sunspots


June 25, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 40
Kp
sc
0o 1+ 1o 1- 1+ 1o 2o 2o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Rz: 24 10cm flux: 75 Flare: 11/21.6 Ca: 4.5 Ip: 0 Ia: 0
June 26, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 50
Kp
sc
2- 2- 2o 1+ 1o 1o 1+ 1-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data
Rz: 33 10cm flux: 77 Flare: 7/23.4 Ca: 7.9 Ip: 0 Ia: 0
June 27, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 400
Kp
sc
1o 1o 1o 0+ 1o 1o 1- 1+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Rz: 38 10cm flux: 79 Flare: 33/23.9 Ca: 8.5 Ip: 0 Ia: 1
(13737) S08
June 28, 1975
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 40
Kp
sc
1- 1- 2- 2- 2- 1- 1- 1+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Rz: 36 10cm flux: 78 Flare: 11/24.0 Ca: 8.5 Ip: 0 Ia: 0



REGIONAL FLARE INDEX
INCLUDES ALL FLARES

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
13689	N 1	75/06/03.0	75/05/25	75/05/28	.89	.89	1
13703	N12	75/06/03.5	75/06/03	75/06/03	5.37	5.37	1
13692	S 7	75/06/06.1	75/06/04	75/06/06	19.69	6.56	6
13729	S11	75/06/13.6	75/06/11	75/06/20	13.03	1.30	8
13722	N 7	75/06/13.8	75/06/13	75/06/19	71.04	14.21	16
13736	S 9	75/06/23.3	75/06/21	75/06/28	56.94	7.12	35
13731	S10	75/06/23.8	75/06/22	75/06/22	5.41	5.41	1
13738	N 7	75/06/30.9	75/06/24	75/07/07	131.57	9.40	42

Note:
Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no flares during its disk passage.

MISCELLANEOUS DATA

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	Page
Cosmic Rays	
Daily Values - Alert and Deep River - October 1975	34
Chart of Variations - Alert and Deep River - October 1975	35
Transmission Frequency Ranges - North Atlantic Path	
Addenda - October 1975	36

COSMIC RAY INDICES

(Neutron Monitors)

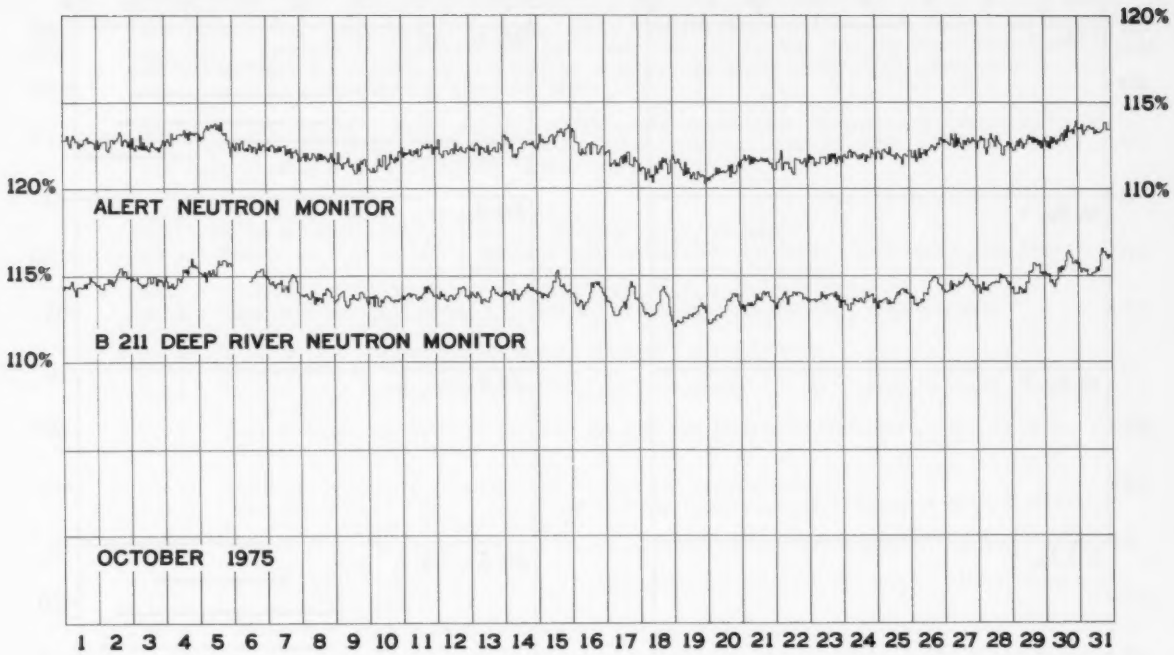
OCTOBER 1975

DATE	ALERT	DEEP RIVER	
1	7526.3	7041.3	
2	7524.4	7064.2	
3	7508.9	7056.9	
4	7546.7	7076.8	
5	7561.4	7101.2	
6	7505.7	7081.9	(12)
7	7492.7	7048.5	
8	7465.1	7004.5	
9	7439.0	6996.0	
10	7442.7	6989.8	
11	7490.2	7009.4	
12	7492.3	7007.5	
13	7497.7	7004.4	
14	7510.5	7017.2	
15	7545.4	7029.9	
16	7508.3	7007.2	
17	7454.9	6980.8	
18	7419.0	6966.5	
19	7413.2	6932.3	
20	7406.8	6955.2	
21	7451.3	6986.3	
22	7439.9	6998.5	
23	7457.2	6996.5	
24	7471.6	6986.1	
25	7475.1	6997.0	
26	7492.3	7019.0	
27	7525.2	7044.8	
28	7518.3	7048.1	
29	7521.3	7060.1	
30	7546.4	7100.3	
31	7575.3	7114.8	
MEAN	7491.1	7023.3	

COSMIC RAY INDICES

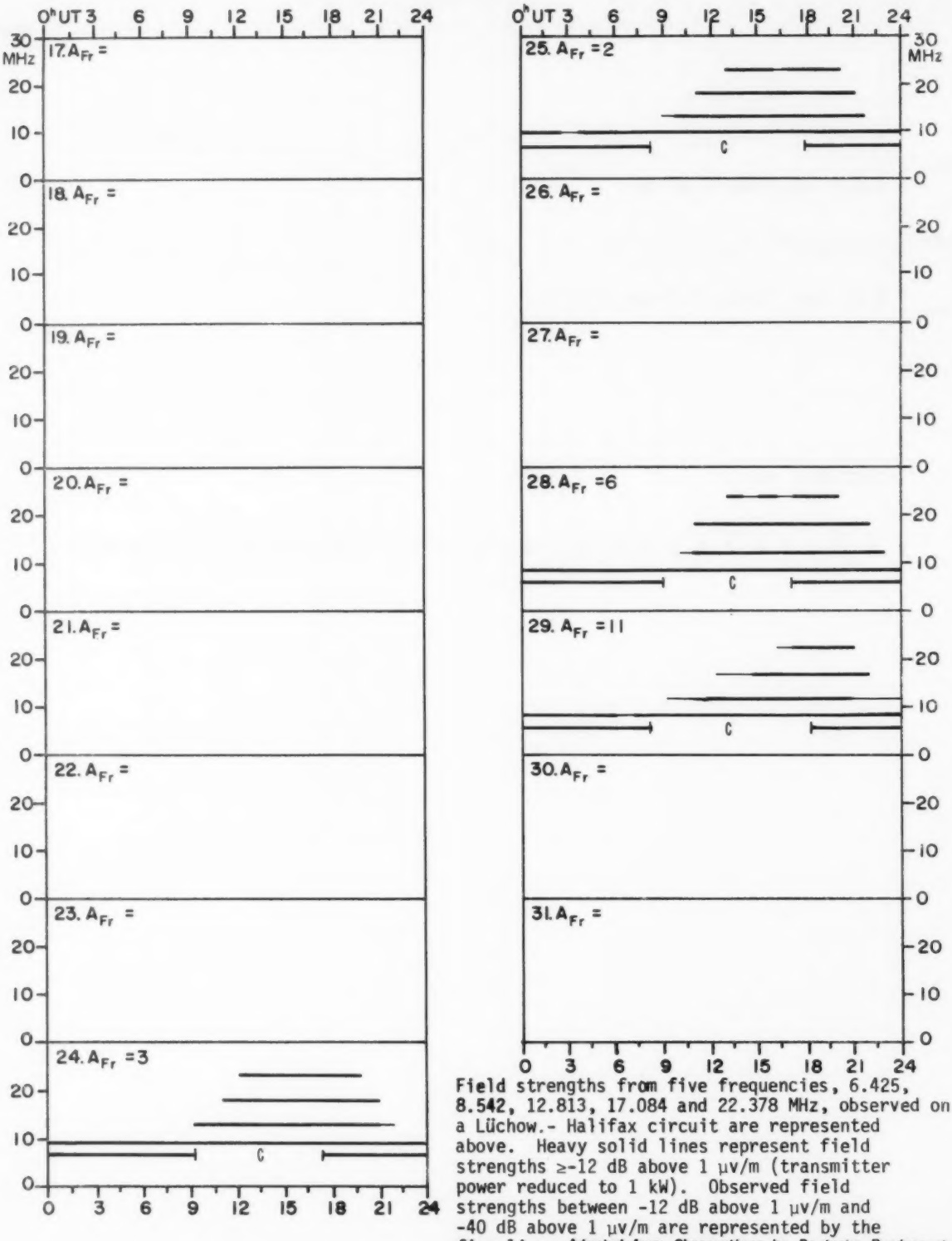
(Neutron Monitors)

OCTOBER 1975



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

OCTOBER 1975 (ADDENDA)



Field strengths from five frequencies, 6.425, 8.542, 12.813, 17.084 and 22.378 MHz, observed on a Lüchow.- Halifax circuit are represented above. Heavy solid lines represent field strengths ≥-12 dB above 1 μv/m (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above 1 μv/m and -40 dB above 1 μv/m are represented by the fine line. Adapted from Observations by Deutsche Bundespost

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